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NINETEENTH ANNUAL REPORT



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Nineteenth Annual Report

of the **BOARD OF COUNTY ROAD
COMMISSIONERS** of *Wayne County,
Michigan*, to the **BOARD OF SUPER-
VISORS** of *Wayne County, Michigan*,
from September 15, 1924, to September 1, 1925, inclusive

BOARD OF COUNTY ROAD COMMISSIONERS, WAYNE COUNTY
1924 - 1925

EDWARD N. HINES (Detroit) *Chairman*
JOHN S. HAGGERTY WILLIAM F. BUTLER
DETROIT TRENTON

LEROY C. SMITH
ENGINEER-MANAGER

| | | | |
|---|----------------------|---------------------------|-------------------|
| J. K. NORTON | Road Engineer | ELMER G. RICE | Attorney |
| R. H. STEKETEE | Maintenance Engineer | H. A. SHUPTRINE | Bridge Engineer |
| PATRICK MCCONALOGUE, Construction Sup't | | HERMAN YONKA | Maintenance Sup't |
| HARRY W. BUTLER, Secretary | | | |

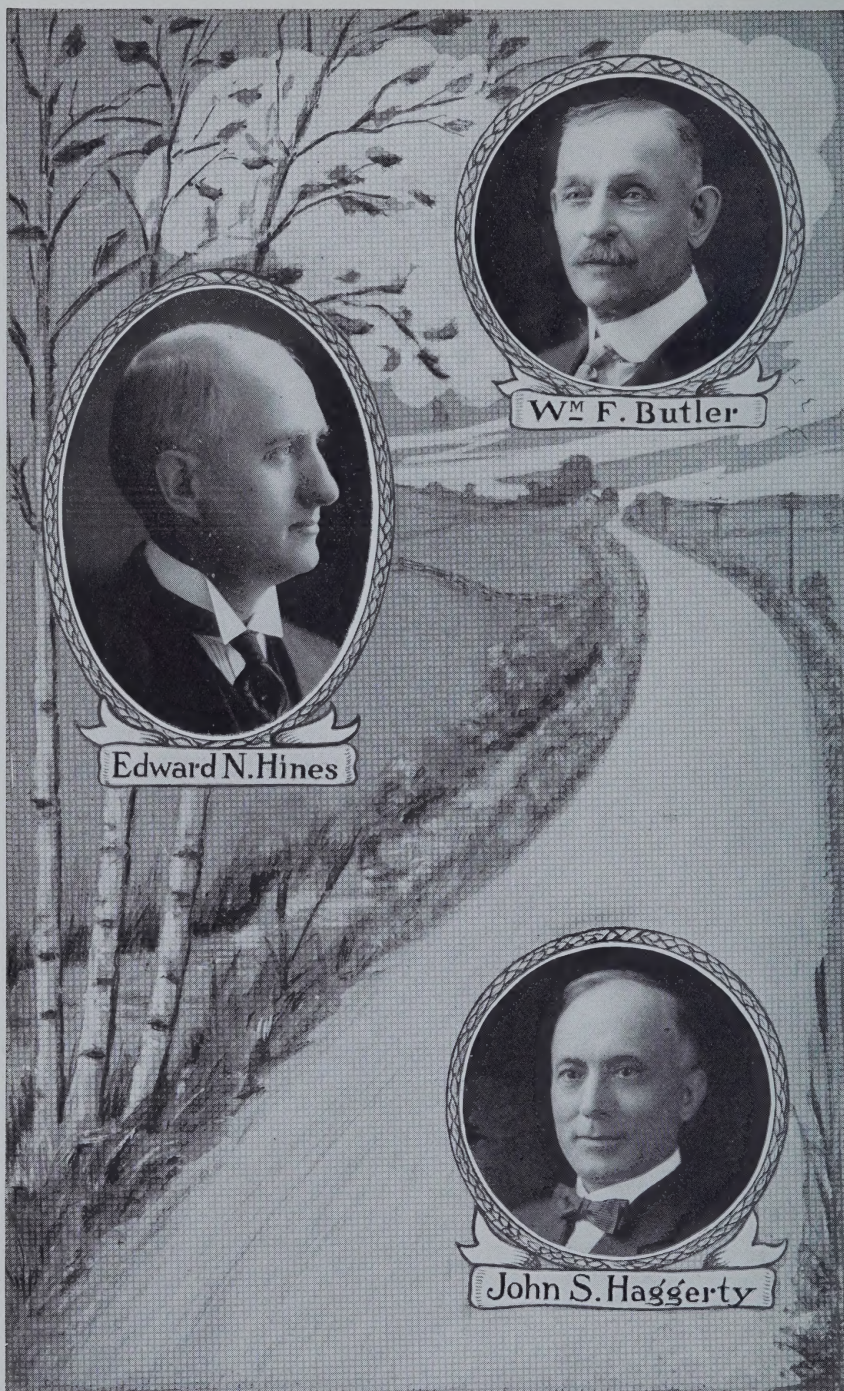
MAIN OFFICE: 1103 Real Estate Exchange Building
TELEPHONE RANDOLPH 9105
DETROIT, MICHIGAN

INCORPORATED HERewith

*Sixth Annual Report of the Board
of County Park Trustees of Wayne
County, Michigan, to the Board of
Supervisors of Wayne County, Michigan,
from September 15, 1924, to September 1, 1925, inclusive*

BOARD OF COUNTY PARK TRUSTEES — WAYNE COUNTY
1924 - 1925

| | |
|--|---------|
| EDWARD N. HINES, Chairman and Superintendent | Detroit |
| WILLIAM F. BUTLER, Secretary | Trenton |
| JOHN S. HAGGERTY, Trustee | Detroit |



BOARD OF COUNTY ROAD COMMISSIONERS
WAYNE COUNTY, 1924 - 1925

BOARD OF COUNTY PARK TRUSTEES
WAYNE COUNTY, 1924 - 1925

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Sunday Afternoon On Any Concrete Road

MILE after mile two lines of cars crawl past each other under the broiling sun—sedans, coupes, racers, limousines, roadsters and touring cars, all crowded to the running boards with hot and tired travelers. The lines move jerkily forward, a few feet at a time, or wait endlessly at crossings, the riders dumb and weary, stolidly enduring the heat.

A stalled car holds up one procession. Its perspiring driver cranks violently on a reluctant motor to the tune of shrieking whistles and horns sounded by impatient motorists held up behind him on the narrow road. A huge truck lumbers along, loaded with wilted young picnickers, scantily clad and hot, but never too hot to be hugged.

An exhausted village traffic policeman scolds angrily at an equally exhausted and very perplexed Italian who drove to the left, although the sign he couldn't read plainly said "Keep to the right." Many cars are pulled to the side of the road and

women in wrinkled Sunday finery wait limply under the scant shade while red faced men toil miserably in the oppressive heat changing tires through blinding fumes of gas and dust.

Busy speed cops tear uselessly past the creeping lines. Incorrigible boys in an ancient flivver take death-defying chances to pass just one more car, always miraculously squeezing back into line again, thanks to somebody else's good brakes and good driving. Another driver equally reckless, but not so lucky, now waits with a crippled car in the ditch for the village towing service.

Children wail while mothers scold and threaten, brakes squeak and horns blare, the little breeze dies off, but the sun beats mercilessly on—

Dear God, and they do it for fun!

CAROL FRANCIS—

in *Chicago Daily News*.

Board of County Road Commissioners

Wayne County, Michigan

DETROIT, MICH., Sept. 1, 1925.

SIRS:

In compliance with the statute relating thereto, we take pleasure in submitting for your consideration our Nineteenth Annual Report, showing moneys received, and disbursed, together with a statement of roads taken over, and the work being done thereon.

Very sincerely,

BOARD OF COUNTY ROAD COMMISSIONERS,

Wayne County, Mich.

EDWARD N. HINES, Chairman

JOHN S. HAGGERTY

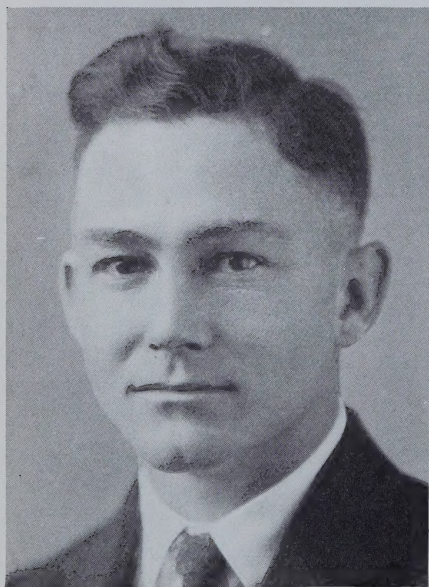
WILLIAM F. BUTLER



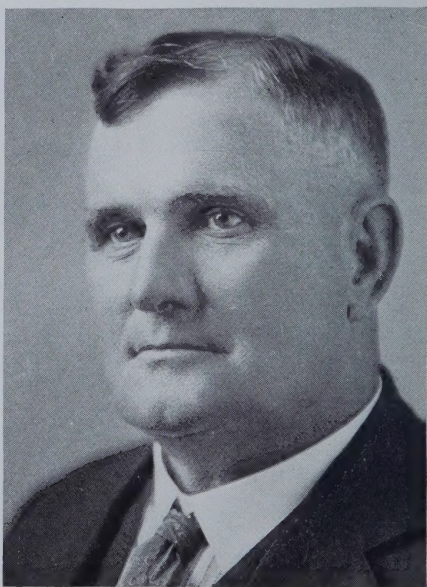
ELMER G. RICE
ATTORNEY



LEROY C. SMITH
ENGINEER-MANAGER



HARRY A. SHUPTRINE
BRIDGE ENGINEER



PATRICK McCONALOGUE
CONSTRUCTION SUPERINTENDENT



JOHN K. NORTON
ROAD ENGINEER



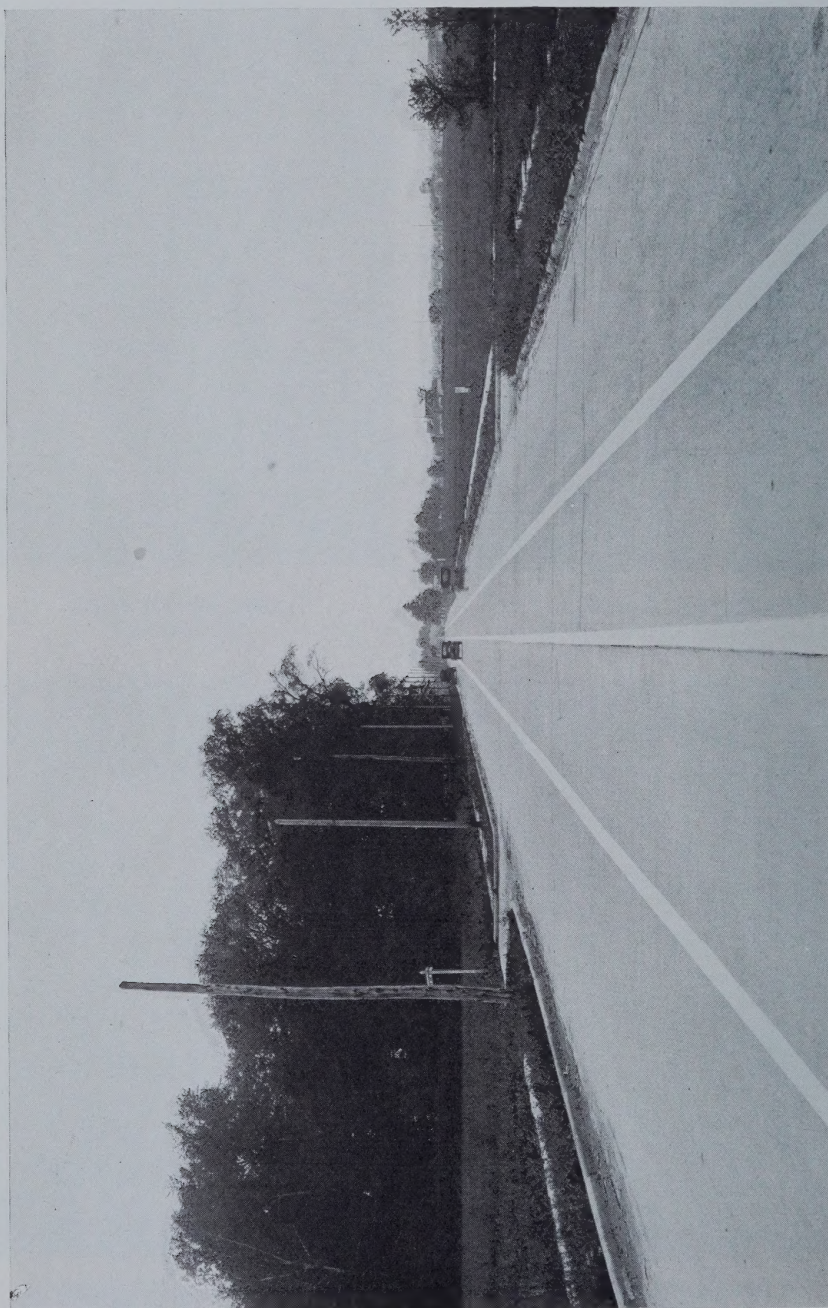
HARRY W. BUTLER
SECRETARY



HERMAN F. YONKA
MAINTENANCE SUPERINTENDENT



RICHARD H. STEKETEE
MAINTENANCE ENGINEER



Tireman Road has been paved to Division Road, 40 feet wide.

Milestones Nineteen

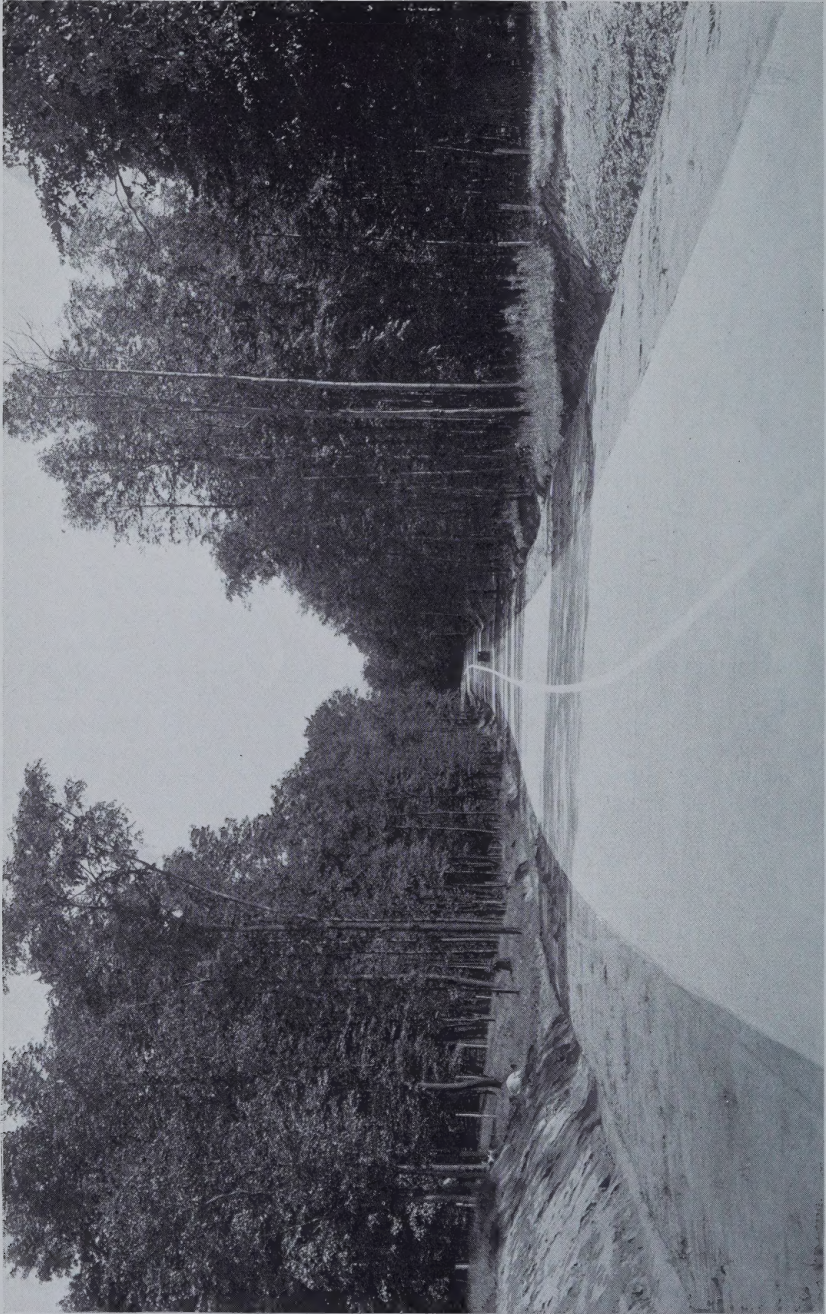
YEAR after year, the preparation of our Annual Report has given us an opportunity to take stock of past accomplishments—and to cast an inquiring glance into the future. Like Janus, the god of Roman mythology, one of whose two faces looks forward and the other backward, we arrive at a division of time in our activities when a glance backward and one forward is wise. •

As we top the grade of this year's activity and pause for a moment at the nineteenth milestone, we have an unobstructed view backward to lesser hills of accomplishment. More than that, there lies before us the Valley of Tomorrow, on the farther side of which is a new pinnacle—a new goal. And the direction of the completed trail indicates the lines along which progress must be made to reach the twentieth milestone.

At the beginning of our undertaking, we fixed our goal on what seemed then to typify achievement. There was much pioneering to be done. No one had traveled the same trail before. Our original goal was reached when the highway system as first planned was completed. A glance in both directions then showed us that while much had been accomplished, there was even more still to do. Traffic was crowding the completed trails and clamoring for wider roads, for adequate direction signs, for public parks and comfort stations, for trees along the highways, for safety provisions and other improvements. It became necessary for us to fix a new goal on a farther, higher hill—one that was not visible when we started.

Last year's accomplishments, therefore, were largely directed toward reaching that new goal. While new concrete was placed on approximately fifty miles of highway, the most important part of our work centered about the widening of existing pavements. In our Twelfth Annual Report, we stressed the fact that traffic seeks the paved road. We predicted that the time was not far off when the existing roads would require widening. That time arrived several years ago, and the work of widening was started. Now it has become our major activity, and for the next five years to come, the work of bringing our highway widths up to a minimum of forty feet will be our principal endeavor.

With our eyes fixed on that new goal, we have continued our activities in acquiring right-of-way for the new super-highways already urgently needed. Actual construction on the Michigan Avenue super-highway is already in progress, and the next few years will see definite accomplishments in this activity.



Ann Arbor Road west of Plymouth, through a beautiful wooded section.

Having provided the highways for Wayne County's 300,000 motor vehicles, it became necessary to make travel over them as safe as possible. To attain this end, the pavements were marked off into 10-foot traffic lanes, additional shoulders were provided for parking, pavement widths were increased at intersections, lighthouses and stop-and-go signals were installed at important crossings, and grade crossings were eliminated.

In the matter of providing for the comfort of the users of the highways, we have continued the policy of planting trees along the highways, and this work will be continued until every mile of paved road in the county will be bordered by two lines of shade-giving trees.

During the past year, nine comfort stations were opened. Most of these are in the county parks, but a few are placed along the highways in tracts of land too small to be included in the park system.

Tourists who follow the concrete between Detroit and Toledo this year, found the new Wayne County "Tourist Lodge" ready to receive them. The Lodge is an attractive brick building, containing all the conveniences the most exacting motorist could ask for. The only charges are a fee of 50 cents per car for each night, and a nickel meter on the gas ranges. Cross-country tourists pronounce it the finest tourist camp in the country.

These are but a few of the outstanding landmarks that a hasty glance backward over last year's activities reveals. They serve as an indication of what our future activities must be.

Again, Wayne County has mapped out a course of action that places it in the forefront of highway development and assures it will remain the Mecca of students of highway development.

The years to come must see Wayne County progressing toward that new goal as steadily as it has toward its original goal. Who knows, but that when we reach our objective, there may not be unfolded before us a new vision pointing the way to even greater service to taxpayer and highway user.





Fort Road just north of West Road. This new road parallels the River Road and will greatly relieve the congestion thereon.

**Board of
County Road Commissioners**
Wayne County, Michigan

—

1906 - 1907

EDWARD N. HINES Detroit
HENRY FORD Detroit
CASS R. BENTON Northville

1907 - 1910

EDWARD N. HINES Detroit
WILLIAM MURDOCH Wayne
JOHN S. HAGGERTY Detroit

1910 - 1925

EDWARD N. HINES Detroit
JOHN S. HAGGERTY Detroit
WILLIAM F. BUTLER Trenton



Michigan Road parkway west of Emerson Road.

Nineteenth Annual Report

DETROIT, MICHIGAN, September 1, 1925.

To the Honorable, the Board of Supervisors, Wayne County:

GENTLEMEN: We herewith present to your Board and to the Citizens of Wayne County our Nineteenth Annual Report, embodying a statement of what we are spending, how we are spending it, and where it is being spent.

This report covers the fiscal year of the County from September 15, 1924, to September 1, 1925, inclusive, and shows the progress made in continuing the highway system of Wayne County towards its logical conclusion.

Roads Completed and Under Construction

We take great pleasure in presenting another splendid record of accomplishment in Wayne County during the period covered by this report. Due to the change in the date of holding the annual meeting of the Board of Supervisors, this report covers a period of eleven and one-half months, from September 15, 1924, to September 1, 1925. During the period in question, we have completed 719,068 square yards of concrete roads, approximating 50 miles of new construction and 12 miles of widening of old concrete roads.

All of our concrete road construction is of our standard type and specifications, averaging 9 inches in thickness, using a rich mix of cement, properly mixed, placed, finished, and cured.

Our principal effort during the past year has been along the line of providing new outlets and inlets to the City of Detroit.

Perhaps the most important project has been the securing of the super-highway width of 204 feet on Michigan Avenue Road from Telegraph Road to the Village of Wayne, a distance of approximately 6 miles. This project was fought through the courts before a 12-man jury, and 80 buildings of various descriptions were totally or partially destroyed.

The first unit of construction has been completed, consisting of a 27-foot concrete road with curb and gutter and closed ditches, and will furnish tremendous relief to the exceptionally heavy traffic using this important thoroughfare. The old 14-year-old concrete road will carry traffic in one direction and the new unit of construction in the other.

The Six Mile Road has been completed from the Village of Redford to Wyoming Avenue. The City of Detroit has continued this pavement from Wyoming Avenue to Livernois Road, and has further carried the Six Mile Road through to Van Dyke Road on the east side of the city.

A 40-foot concrete road with curb and gutter and closed ditches, has been completed on Tireman Road from the City of Detroit to the Division Road.



Ford Road east of Division Road, 40 feet curb to curb, providing a new thoroughfare into Detroit from the West, connecting with McGraw Avenue at the city limits.

The Ford Road will be completed this fall, from the city limits to where we left off construction work last fall, just north of the Village of Dearborn, furnishing a new, continuous concrete road from the city limits to Canton Center Road. Within the City of Detroit, the Ford Road becomes McGraw Avenue, and the city authorities have condemned approximately ten blocks and are engaged in demolishing the houses, grading and paving at the present time.

City authorities are also making available the continuation of Plymouth Road within the city limits, known as Coon Avenue, through the medium of condemnation proceedings, which have been carried to a successful conclusion, and a city pavement is being constructed from our 40-foot concrete road on Coon Avenue to connect with Grand River Avenue.

The improvement of Van Dyke Road has also been concluded, from the Seven Mile Road north to the county line. As we reported last year, this right-of-way has been widened from 66 to 100 feet, in the center of which 22 feet has been provided for interurban tracks, and two 20-foot pavements with curb and gutter and closed ditches, have been constructed. Macomb County has continued the same type of improvement north for a distance of approximately 5 miles.

Fort Road has been carried south from the Eureka Road to the Village of Rockwood, at the Monroe County Line. This is another 9-inch thick, 20-foot wide, 40-foot over-all concrete road, and provides a by-pass road avoiding the numerous cities and villages on the old River Road, such as River Rouge, Ecorse, Melvindale, Wyandotte, Trenton, Sibley, etc.

The Waltz Road has been continued north from the Willow Road to connect with the Village of New Boston, over a new bridge spanning the Huron River. This makes a saving in distance of better than 5 miles over the former existing route.

Division Road has been continued south from Michigan Avenue Road to connect up with the City of River Rouge. There will be an uncompleted gap of approximately one mile, which will be taken care of next year. A grade separation and a bridge, with clear roadway of 40 feet, are practically completed on this road at the present time.

Emerson Road has been carried south from the junction of Southfield and Seven Mile Roads to Michigan Avenue Road, making a much-needed parallel road to Division Road to take care of the heavy southbound traffic.

The Plymouth Road has been carried west from the Village of Plymouth to the Washtenaw County Line. About 2 miles east of the Village of Plymouth, the Federal Government and State of Michigan participated to the extent of 75 per cent in the cost of constructing a by-pass road so that through traffic could avoid congestion through the village.

The Middle Belt Road has been completed from the Oakland County Line to the Plymouth Road, making a continuous, straight, north-and-south, 20-foot, 9-inch concrete road, 40 feet overall, bi-sectioning the county



Warren Road near Emerson Road, showing the old 18 foot pavement widened to 30 feet. Additional widening will be provided in 1926, making a road 40 feet wide as far as Telegraph Road.

a little better than 23 miles in length, ending at the Huron River Drive.

The Allen Road has been carried north from Oakwood Boulevard to the intersection of Division Road.

All of the small, uncompleted sections carried over from our last report were completed and opened to traffic last fall.

Old Concrete Roads Widened

In addition to this new construction, Seven Mile Road has been widened out to its ultimate, minimum width of 40 feet from Woodward Road to Livernois Road; and from Livernois Road, the widening of an additional 11 feet has been completed to the Southfield Road. The work of adding the additional 11 feet, to bring the width of this road to 40 feet, will be done early in the spring.

The north side of Warren Avenue has also been widened by the addition of 11 feet on the north side, west to Telegraph Road. The additional 11 feet, to bring Warren Avenue to the ultimate, minimum width of 40 feet, will be added to the south side early next year.

Forty Feet of Concrete Our Ultimate Minimum Width

For several years past, we have been engaged in numerous widening projects to bring the old concrete roads of a lesser width than 20 feet up to our ultimate, minimum width of 40 feet of concrete. We believe that the greatest service we can render to the traveling public during the next few years, is to apply the major portion of funds available on widening projects.

In our opinion, it speaks well for the type, design, and quality of construction that concrete roads, ranging in periods of serviceable use from five to sixteen years, lend themselves so admirably to this widening program without any sacrifice to initial investment. While it is desirable to add annually some additional mileage, we believe the greater service can be rendered through widening our old concrete roads.

We are marking, with our white safety stripe, all of our roads into 10-foot traffic lanes, and are urging all slow-moving traffic to use the outer lanes. We believe our plan of road marking of this type, which in itself is inexpensive, is one of the greatest factors for safe driving that we have ever instituted.

During the period covered by this report, we have opened for traffic and practically completed the construction of thirteen bridges. However, an exception must be made on the Dix bascule bridge, where construction work is proceeding rapidly. This is an exceptionally large project, involving the expenditure of \$1,000,000.00, and we expect to have this bridge open to traffic by the middle of next summer.

Detail mention of both our road and bridge projects are covered more fully in other sections of this report.

Five grade separation projects are in various stages of construction, and all of them will be completed at early dates.



The Northville Road in Plymouth, 40 feet wide from curb to curb.

Upwards of 9000 trees have been planted along our roadsides, and something like 2500 trees and 8000 shrubs have been planted in our parks.

New Park Sites Secured

Two new parks have been deeded to the County, without cost to the County. One is the generous gift of the late Cass R. Benton, who served with Edward N. Hines and Henry Ford as one of the original Board of County Road Commissioners. It is a beautiful site on the Northville Road, between Plymouth and Northville. Steps are being taken to properly improve this site.

At the junction of the Huron River Drive with the Belleville and Sumpter Roads, another park site, known as Victory Park, has been generously deeded to the County as a park. A public comfort station has been erected at this point to take care of the public in a proper, sanitary way.

Additional comfort stations have been erected in Elizabeth Park and on the Telegraph Road. This is a feature of road construction that is meeting with great public approval, and with upwards of 300,000 motor cars using the roads in this county, to say nothing of the thousands upon thousands of motorists who flock to Wayne County for pleasure purposes, these comfort stations are a decided public necessity, and additional ones should be planned and built at an early date.

On the mainland portion of Elizabeth Park, a Public Tourists' Camp Site has been located, together with a Public Shelter and Tourists' Lodge. This camp site was opened to the public on the 15th of June, and has been crowded to capacity practically all summer.

Sign boarding and maintenance are constantly under way to keep our roads in a high state of repair and efficiency, with a minimum of discomfort and cost to road users.

Super-Highway Plan

In conjunction with the Rapid Transit Commission and the authorities of the adjoining counties, all the territory lying within a 15-mile radius from the Detroit City Hall has been mapped, and thereon has been laid a scheme of thoroughfares which have been designated as super-highways.

The right-of-way widths have been selected, after much thought and detailed planning. Every 3 miles, a right-of-way having a total width of 204 feet is being secured. The radial main arteries, which are of greater importance than meridian roads, since they have no main parallel highways, are also having the 204-foot width. Between these super-highways there will be, at every 1-mile interval, a road built upon a right-of-way width of 120 feet. On the half-mile lines, the right-of-way will be 86 feet.

In the area to which this plan has been applied, namely, that within a 15-mile radius from the City Hall, there will be 225 miles of these



Fort Road south of Eureka Road. This new thoroughfare has now been extended to Rockwood, thereby greatly relieving travel on the River Road through Wyandotte and Trenton.

super-highways, of which 44 per cent, or about 100 miles, lies within Wayne County.

We are carrying the plan further, however, on certain important thoroughfares. For example, on Michigan Road, which is Detroit's principal artery to the west, the super-highway will be carried to the western boundary of Wayne County, a distance of about 28 miles from the City of Detroit. On another artery, Woodward Avenue, which is our main thoroughfare to the northwest, there has been practically completed a highway which is consistent with our scheme of super-highways previously described. The State of Michigan and Oakland County has this improvement in charge, which will be continued to the city limits of Pontiac, a distance of approximately 16 miles from the Wayne County Line.

Splendid Cooperation from Our Officials

The Board of County Auditors of Wayne County are heartily and enthusiastically cooperating with our Board and other interested Boards, and are not authorizing plats unless the various widths herein proposed are dedicated to the use of the public. We believe the securing of rights-of-way for this super-highway system is fundamentally sound, and that this work should be carried on uninterruptedly.

Every effort has been made, as in the past, to carry on our operations economically and quickly, with as little inconvenience to traffic as possible. On the whole, we have received splendid cooperation, not only from our own forces but from other units of government, such as the Board of County Auditors, the Detroit City Plan Commission, the Rapid Transit Commission, our County Treasurer, our County Clerk, our Register of Deeds, and the Prosecuting Attorney's office, to whom we gratefully acknowledge our thanks.

Michigan Avenue Road Improvement

Having carried our double pavement improvement on this highway as far west as the Telegraph Road in 1924, we expended every effort to reach the Village of Wayne, a distance of 6 miles, this season with this type of construction. Grading and drainage structures were completed just in advance of our paving crew.

All operations were carried on without any inconvenience to the traveling public—a consideration always foremost in the mind of this Board.

The acquisition of additional right-of-way, 204 feet over all, permitted us to build the first unit of a super-highway as proposed by the Rapid Transit Commission.

All ditches are closed, curb and gutter installed, and grades laid low to meet the needs of a rapid building program now being carried out on this important highway.



Emerson Road, near the intersection of Warren Road. This road is now paved from Michigan Road to the Seven Mile Road, there connecting with Southfield Road into Oakland County.



Six Mile Road. This road is now paved from Redford to Wyoming Avenue, there connecting with the city pavement.

The pavement has a width of 27 feet, 9 inches thick, and so designed that widening of same can be easily accomplished whenever the present three-lane pavement becomes inadequate. In addition to this new pavement, we continue to utilize the old pavement for travel in the opposite direction.

Fort Road

The extension of Fort Road from Eureka Road to West Road, and thence southwesterly over recently acquired right-of-way to Rockwood, a distance of $10\frac{1}{2}$ miles, will tend to relieve the intolerable traffic conditions on River Road between Wyandotte and points south.

This pavement is 20 feet wide with 10-foot shoulders, 40 feet over all, a departure from our former design to enable us to widen existing roads without disturbing drains or ditches. This wide shoulder also permits parking of vehicles outside the limits of the pavement.

We expect this highway to carry through traffic during the season of 1926, at which time we wish to reconstruct that portion of the River Road from Wyandotte to Trenton, which will connect with our wide pavement south to the County Line at Rockwood. One-half mile of pavement was laid on Sibley Road between Fort and River Roads to give proper connection to the Villages of Sibley and Riverview with the new Fort Road.

Middle Belt Road Completed

The past year brought about the completion of our Middle Belt Road. The last section just finished extends from Plymouth Road north to the County Line, a distance of $4\frac{1}{2}$ miles. There still remains one-half mile of unimproved road in Oakland County to make a paved connection with Grand River Road.

However, as in the past, we have received wonderful cooperation from the Oakland County Road Commissioners, and in this case, they have given us assurance that this short gap will be closed at an early date.

This road is 23 miles long, connecting Grand River Road with Huron River Drive, bi-secting Wayne County north and south.

This project is a 20-foot concrete pavement, 8-inch center and 10-inch edge, with a width from berm to berm of 40 feet.

Tireman Road Paved to Division

One and one-half miles of 40-foot concrete pavement, 9 inches thick, with curb and gutter, was completed on Tireman Road this year.

This improvement opens up a new route out of Detroit by way of West Grand Boulevard. Detroit and Springwells having paved this project as far as Miller Road, this Board deemed it advisable to extend the improvement to our first north and south county road, so that



The Waltz Road, south of New Boston, before and after improvement.

100 per cent service might be obtained from this improvement made by the above-mentioned cities.

Forty feet permits of four lanes of traffic, the ultimate, minimum width of all the concrete roads in Wayne County.

Ford Road Improved

We are pleased to announce the completion of Ford Road, extending from the Detroit city limits to Telegraph Road. The portion of Ford Road west of this point was paved during 1924. This road connects with McGraw Avenue, recently opened and paved by the City of Detroit.

Similar to Tireman, this road gives another excellent outlet from the northwest section of Detroit, and will tend to relieve the intense traffic now carried by Michigan Road.

On that part which lies within the City of Springwells, a width of 40 feet, with curb and gutter, was constructed, a distance of 2 miles. Beyond the west limits of Springwells, the regulation 20-foot concrete pavement was built, with wide shoulders to permit future widening. The total length of pavement laid on this road was approximately 6 miles.

Emerson Road

The need for additional north-and-south paved highways led us to consider the improvement of Emerson Road, which lies 1 mile west of and parallel to Division Road. It is the extension of Southfield Road, and gives Pontiac and Birmingham a direct route to Dearborn at Michigan Road. It is built of 20-foot concrete, 8 to 10 inches thick, and flanked on both sides with 10-foot shoulders.

Six Mile Road Finished

During the past season, we completed the remaining $3\frac{1}{2}$ miles of this highway, leading directly west from the Ford industries in Highland Park to Redford. Detroit recently paved that portion between Livernois and Wyoming Avenue, giving a paved connection with that portion under our jurisdiction, which extends from Wyoming to Grand River Road in the Village of Redford. The metal track is designed 8 inches at the center and 10 inches at the edge, with a width of 20 feet of concrete, 40 feet over all.

Ann Arbor Road

In order to avoid the congested streets in the Village of Plymouth, this road was planned to run south of the village. The grading was performed in 1924 and paved to a width of 20 feet by county forces during the past season, a distance of $5\frac{1}{2}$ miles.

This is a Federal Aid project in which the Federal and State Governments participated to the extent of 75 per cent.



The River Road has been widened to 40 feet adjacent to Elizabeth Park.

Plymouth Road Completed to County Line

The Plymouth Road has been completed and opened to traffic from its intersection with Canton Center Road to the Wayne-Washtenaw County Line. The westerly $1\frac{1}{2}$ miles was built with Federal aid, the easterly one-half mile lying within the Village of Plymouth and built 33 feet wide, was partially paid for by the village, the balance was built with county funds.

This highway gives Plymouth travel another excellent outlet to Ann Arbor and points west.

East Side of Van Dyke Finished

One side of a double roadway on Van Dyke Road was completed late last fall. Work was started this year on the east side and completed a few days ago.

After the usual 28-days cure, this road will be opened up to traffic.

Macomb County has paved the continuation of this road with the same width and type of construction.

The completed job presents a pavement 56 feet over all, with curb and gutter and closed ditches, 1 mile in length. With the paving of Van Dyke in the city, an excellent new route is opened for traffic to the north.

Waltz Road Paved and Opened to Traffic

In the southwestern part of the county, need was seen for a north-and-south road, to give people living in that section a route across the county due north through New Boston, Romulus, Wayne, and points north to Farmington.

This pavement leads from our Willow Road north to the Village of New Boston, a distance of $3\frac{1}{2}$ miles. The grading and drainage structures were completed last year, as also was the acquisition of 1 mile of new right-of-way necessary to eliminate bad curves and give a proper approach to the new bridge across the Huron River at New Boston.

Division-South Dearborn Roads

Concreting has started on the Division and South Dearborn Roads, which form an important link in our inner belt system around the City of Detroit. At present, very little of this paving has been done. However, before the season closes, we expect to have these two projects completed, with the exception of that mile adjacent to Michigan Avenue Road.

This must be necessarily omitted because of the grade separation work to be done at its intersection with the Michigan Central Railroad. This project is 6 miles long, varying in width from 20 to 40 feet of concrete, 8 to 10 inches thick, and finished with 10-foot shoulders on each side.



*Ann Arbor Road, west of Plymouth, showing conditions before and after improvement.
This road connects Detroit, Plymouth, and Ann Arbor by the shortest and
best route.*

Allen Road

One mile on Allen Road, connecting Oakwood Boulevard with Division Road, has been completed and opened to traffic.

It is of the regulation 20-foot width, with 10-foot shoulders.

The balance of this highway, from Ecorse Road south to Fort Road, is now graded, and will be included in our program for paving in 1926.

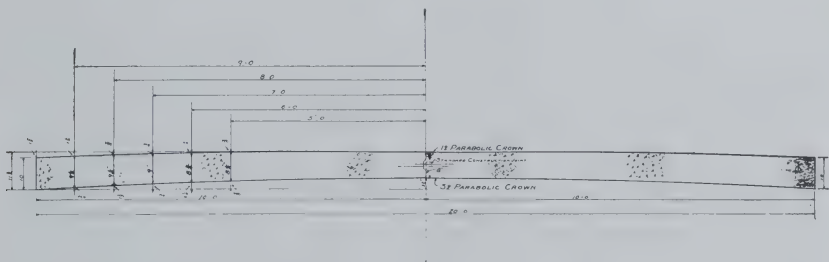
Design and Construction Methods

During the past season we have adopted, as a policy, shoulders of a minimum width of 10 feet, which in the case of a 20-foot pavement, permits of parking outside the limits of the paved track.

The steel center-plate, placed longitudinally along the center of the concrete pavement, prevents many unsightly cracks, and has been universally adopted on all our county road construction.

Expansion joints are now placed at 100-foot intervals and being 1 inch in thickness instead of $\frac{1}{2}$ inch as heretofore.

Due to corner breaks, we have thickened our edges to 10 inches, and are now using the standard cross section as detailed below:



Concrete Roads Widened with Concrete

Our policy adopted a few years ago, of widening our concrete roads where traffic warrants, has continued during the past season.

Eleven and one-half miles of these older roads were widened this summer.

River Road has been widened on the west side from Trenton to Rockwood to a width of 30 feet. It is planned to eventually widen this highway to a width of 40 feet, made necessary by the fact that it is the main highway leading into the City of Detroit from the south.

The Seven Mile Road, from Livernois to Woodward Avenue, has been widened on both sides to a width of 40 feet, and on the north side only, from Livernois west to Division Road.



Six Mile Road at Emerson Road. All intersections are now constructed 40 feet wide.

All ditches have been closed and shoulders made wide so as to make this road as safe as possible for motorists.

Warren Road, from Schaeffer Road to the new River Rouge Park, has been widened to 30 feet on the north side only, for a distance of 3.6 miles. Traffic congestion has been particularly bad on this section, and although the ultimate width will be 40 feet, providing four lanes of travel, a marked improvement in speed of traffic has been noted already.

The fact that we are able to widen the metal track after many years of use, speaks well for the type and design used at the time of construction of these roads.

At no instance have we had occasion to completely replace the older concrete. They have withstood the intense traffic to which they have been subjected, and give every evidence to many more years of use.

Roads Graded

In the past, we have endeavored to complete the grading and drainage structures on county roads one year in advance of paving. By careful planning, this can be done on new projects.

However, the widening of old roads necessitates that this work be done just in advance of paving operations. Because our program for 1926 contemplates much widening, to our ultimate, minimum width of 40 feet of concrete, we cannot report as much mileage graded as in previous years.

We have graded and have in the process of grading, approximately 23 miles of new roads.

Allen Road

The extension of Allen Road, from Ecorse Road to Fort Road, has been graded and is now ready for concreting in 1926. Work was well under way early this spring. The subgrade design calls for a width of 45 feet, which will permit the construction of a 20-foot concrete road, with our standard 10-foot shoulders.

Mount Clemens Drive

In cooperation with the Macomb County Road Commission, another route will be opened to Mt. Clemens early next year. Two miles of this new route lies within Wayne County.

The necessary right-of-way has been obtained, and a contract for the grading has been let. This road will be paved in 1926.

Dix Road Started

In cooperation with the State Highway Department, we are now grading Dix Road, from the Dix bridge over the River Rouge, southwesterly to the junction of the West and Telegraph Roads.

This road makes an excellent new, direct road to Monroe and Toledo.



Livernois Road and Seven Mile Road intersection, showing traffic governed by the new automatic signals.

One Mill County Road Tax Recommended

We believe that the fundamental plan of the County Road Commission should be carried on uninterruptedly, and that a constant and determined effort be made to widen out all of the existing mileage of a width of less than 20 feet to our new, ultimate, minimum width of 40 feet of concrete.

We believe that it is desirable to annually add some additional miles of new county road.

We believe the securing of rights-of-way for the super-highway system is fundamentally sound, and that this work should be carried on continuously.

The separation of grades should be carried on as rapidly as agreements can be consummated with the various railroad corporations operating in this territory, and that the proper functioning of other related road problems should go on to the limit of our capacity to pay.

To carry on such work without interruption, we recommend the levying of a one-dollar tax on each \$1000.00 of the equalized assessed valuation of the county for county road purposes in 1926.

Map of Roads

The map inserted in the back of this report shows the work completed and under construction in improving the highways in Wayne County. It also shows the location of county parks, county comfort stations, and completed grade separation projects, as well as the roads recommended to be taken over as county roads for our 1926 program. The parks, of course, are under the jurisdiction of the Board of County Park Trustees.

The reverse side of the map shows a map of the proposed super-highway system.

Highway Service and Maintenance

THE work of keeping in service for the public a system of highways such as Wayne County's is no small task. The steadily increasing number of pleasure and commercial cars, particularly the heavy trucks, together with the expansion of the city both in residence and industrial sections, places a burden on the roads which could not be borne by them if these roads were not given constant maintenance.

In order to properly give good service to the public on our system of highways, it is necessary to maintain an organization which is capable of handling a diversity of work. This work includes the care of ditches, culverts, shoulders, patching and tarring of pavements, and the placing of signs and signals.



The Seven Mile Road has been widened to 40 feet between Woodward and Livernois. This is a great relief to traffic congestion.



Seven Mile Road near Southfield Road, showing three-year old elms.

We will not attempt, in this report, to discuss fully the details of the organization used for carrying on this work, nor the methods used in carrying it out, but will tell of special features and improvements introduced since the last report.

Widening and Patching

Worthy of special note is the effect that the widening of a pavement has had upon the maintenance of concrete and shoulders. On roads where it was found almost impossible to keep the shoulder smooth before widening, and then only at great expense, require practically no attention after widening. This is particularly noticeable on River, Seven Mile, and Warren Roads. The patching of the edges of the concrete has been greatly reduced by the widening of the pavements.

Another feature which reduced the congestion on our highways to a very noticeable degree is the use of a special alumina cement for making patches. This permits us to open a patch to traffic twenty-four hours after the same has been made.

When one realizes that prior to the use of this special cement, it was necessary to keep a patch closed to traffic for a period of two weeks, even under the most favorable conditions, one can readily see the relief given traffic by the use of this cement, and that the extra cost of this special cement is money well expended.

Signs and Marking

There is nothing more appreciated by the public who use the highways than an intelligent system of signs and markings. Improvements and necessary additions have been made to our present efficient system during the past year. Twenty new standard sign-posts have been set at intersections of our new highways, giving the name of the highway, together with the distance and direction to other important roads or towns.

Additional warning signs have been placed at necessary points. One of these in particular, the "Walk to Left" sign, has had a very desired effect.

Pedestrians using the highway are fast learning that it is less dangerous to walk against traffic than it is to walk in the direction that traffic is going.

One improvement in direction signs which has caused much favorable comment has been the placing of the directions to towns and other important roads on the base of the flashers marking paved road intersections. The usual road signs are difficult to see after dark, while those placed on the base of the flashers can readily be seen in the light of the headlights.

In order to make our road signs effective, we find it necessary to keep careful watch that no advertising signs are placed in the highway right-of-way, as such signs noticeably reduce the effect of our legitimate road signs.



Warren Road at Division Road, showing the use of the new 40-foot pavement and traffic signal.

In most cases, we find that lack of knowledge of the law is the reason for placing advertising in the highway, and usually when notified, the owners of the signs are glad to remove the same.

The marking of the center line of the pavement has been continued, and much favorable comment has been received from people outside of the county on this feature. One improvement in this marking has been made on roads which are 25 feet or wider. On these roads, two or more lines have been placed, marking three or four lanes for travel. This has had the desired effect of keeping traffic to the edge of the road, allowing other vehicles to pass in the center lanes. When but one line was marked on these pavements, traffic spread all over the pavement and the extra width was not utilized to the fullest extent.

Signals

Gas and electric signals have been found to be a most important feature of our highway service. There is little doubt but that innumerable accidents have been prevented by the placing of these signals.

A number of new gas and electric flashers have been placed at new intersections.

It has been found necessary at some of the heavily traveled intersections to place traffic control signals. Three of these are now operating and are giving excellent assistance to traffic. The signals used are the three-light signals as used in the city. They have proven their value, and others will be placed where need of them is found.

Railroad Crossings

The grade crossings of all railroads with our county roads have been kept in smooth condition by giving these crossings constant inspection. As soon as work is required on these crossings, the railroads are requested to make the necessary repairs. Good cooperation has been received from the railroads in this work.

Grade separations are, of course, desirable at the crossings of all highways and railroads, but because it is not possible to separate all grades at once, we are endeavoring to have flashlight warning signals of approaching trains installed at all crossings.

Some of these signals have been installed, some have been ordered installed, and others are now up for hearing before the Michigan Public Utilities Commission. Because these signals must be connected to a track circuit and must be installed by the railroads, it is necessary to bring the matter before the Utilities Commission before orders for these installations can be secured.

Protection of Highway from Overload

Protection of our highways against damage by overloaded trucks has been found necessary. It is not reasonable to let a small number of vehicles do unlimited damage to our highways because a few wish



Ann Arbor Road at the junction with Canton Center Road, one-half mile south of Plymouth. This new road provides a new and more direct connection between Detroit and Ann Arbor.

to load their trucks beyond the load limit provided in the state law. A large number of the trucks which have been weighed up to this time have been found overloaded from two to five tons on the rear axle.

The Seven Mile Road, east from the Village of Northville, has been used by overloaded gravel trucks, and is a very good example of what damage can be done to a road by overloads.

Innumerable breaks have occurred along the side of this road on which the loaded trucks travel. The cost to the county of repairing these breaks is far in excess of what is saved by truck owners in carrying the extra loads.

Only warnings have been issued to the drivers of overloaded trucks up to this time, but arrests will follow if these warnings are not heeded.

Permits

Our policy of forbidding any work by others to be done along our highways, except under special permits issued by this Board, is being carried out.

Public utility companies, corporations, and private individuals now realize that a permit is necessary when any work is done which involves excavating within highway limits, filling and tiling of ditches, cutting of pavement and curb and gutter, or the moving of loads of any special nature along our highways.

As a result of this policy, we find that much more satisfactory work has been done, with less damage to the highways and less inconveniences to traffic.

Gasoline Pumps

The work of removing gasoline pumps which have been in place in the right-of-way along county highways has been continued. The result is that twenty-five of these pumps have been moved to date. The City Council of Detroit has given fine assistance in the moving of these pumps off from the highway where such pumps are within the city limits.

In a resolution passed by them, they have refused to issue new permits for such pumps, and when the present permits expire, renewals will not be issued.

Traffic Census

In studying the needs of Wayne County's system of highways, we find a well-planned traffic census is of considerable value. We have just completed taking a six-day count of fourteen hours each at 100 points in the county. A study of these counts enables us to intelligently determine where relief is necessary, and is of great value in determining the proper location of new highways and where widening is necessary on the old ones.

The following is a partial list of these counts, showing the location of the road, the maximum daily count, and the average for the six-day period.

Traffic Census for Wayne County, 1925

Traffic counts at intersections as indicated below

| Road | 14-hr. Count | 1-hr. Count | Road | 14-hr. Count | 1-hr. Count | Vehicles using intersection | |
|------------------|--------------|-------------|---------------------|--------------|-------------|-----------------------------|-------------|
| | | | | | | 14-hr. Count | 1-hr. Count |
| Gratiot..... | 14,379 | 1,654 | Seven Mile..... | 9,985 | 1,142 | 24,364 | 2,796 |
| Van Dyke..... | 8,652 | 1,027 | Seven Mile..... | 12,020 | 1,558 | 20,672 | 2,585 |
| Division..... | 2,560 | 352 | Seven Mile..... | 8,214 | 1,305 | 10,774 | 1,657 |
| Grand River..... | 19,667 | 2,280 | Seven Mile..... | 6,105 | 728 | 25,772 | 3,008 |
| Plymouth..... | 4,078 | 509 | Telegraph..... | 4,579 | 544 | 8,657 | 1,053 |
| Grand River..... | 18,163 | 1,971 | Five Mile..... | 8,960 | 1,360 | 27,123 | 3,277 |
| Division..... | 6,740 | 835 | Michigan..... | 16,529 | 2,082 | 23,269 | 2,917 |
| Mack..... | 13,779 | 1,813 | Seven Mile..... | 5,248 | 1,021 | 19,027 | 2,834 |
| Middle Belt..... | 4,024 | 511 | Warren..... | 4,311 | 612 | 8,335 | 1,123 |
| Telegraph..... | 9,516 | 998 | Michigan..... | 14,423 | 1,548 | 23,939 | 2,546 |
| Fort..... | 11,064 | 2,263 | Ecorse..... | 4,929 | 619 | 15,993 | 2,882 |
| Middle Belt..... | 2,124 | 257 | Ecorse..... | 4,762 | 602 | 6,886 | 859 |
| Fort..... | 6,370 | 648 | Eureka..... | 5,126 | 551 | 11,496 | 1,199 |
| River..... | 13,296 | 1,236 | Grosse Ile..... | 2,161 | 215 | 15,457 | 1,451 |
| River..... | 12,489 | 1,361 | Elizabeth Park..... | 5,297 | 696 | 17,786 | 2,057 |
| Wayne No..... | 1,764 | 216 | Ford..... | 3,119 | 310 | 4,883 | 526 |
| Northville..... | 4,764 | 659 | Five Mile..... | 2,702 | 389 | 7,466 | 1,048 |
| Michigan..... | 6,007 | 579 | Canton Center..... | 2,093 | 227 | 8,100 | 806 |
| Huron River..... | 1,952 | 352 | Wayne So..... | 3,658 | 368 | 5,610 | 720 |
| Huron River..... | 1,812 | 221 | Willow..... | 2,200 | 266 | 4,012 | 487 |
| Telegraph..... | 9,041 | 933 | West..... | 2,013 | 292 | 11,054 | 1,225 |
| Huron River..... | 7,613 | 674 | River..... | 8,636 | 790 | 16,249 | 1,464 |
| Seven Mile..... | 11,498 | 1,600 | Livernois..... | 8,447 | 996 | 19,945 | 2,596 |

Practically in every case, the maximum daily count occurs on a Sunday, with the maximum hourly count occurring between 5 and 6 p. m. on some roads, and 8 to 9 p. m. on others. It must be realized that the above figures are not total daily counts, but, inasmuch as the same hours were used at all places the results are comparative.

An interesting fact in the taking of these counts is that boy scouts were used in this work, and they showed themselves to be very faithful and reliable workers.

The above outlines quite clearly what has been done by us in making our system of 425 miles of improved highways of better service to the public. The work is not yet complete and probably never will be as long as Wayne County continues to grow and progress. It is our hope and desire to serve the public in the best possible manner by keeping our system of highways safe and efficient at all times.

Roadside Development

THE development during the past year of this phase of road improvement has brought out convincing results. Our first planting of three years ago is beginning to bear out the future appearance of our roadsides.

Within the short space of a few years, our planted highways will become country drives comparable only to the finest boulevards, and to those who give this matter a second thought, our present accomplishments stand out in vivid contrast to the barren, treeless stretches of county roads which existed only a short time ago.

To date, over 17,000 trees have been planted, covering more than 135 miles of improved county roads. A total of 7500 shrubs have been planted at various intersections, where small triangular parks have been constructed. Trimming has been completed at all dangerous intersections, railroad crossings, and along more than 60 miles of road.

All planted trees and shrubs have been sprayed both with dormant and summer spray. A total of 31,000 square yards of sod have been placed on slopes at grade separations, bridges, and through various heavy cuts and fills.

As in the past, all public utility companies are continuing to co-operate with us in placing poles to avoid trees, and in trimming for the maintenance and construction of their lines. All jobs covered by permits have had our usual thorough inspection.

Considering the work of roadside development, which includes planting trees and their maintenance, trimming, spraying, sodding, providing parking spaces, comfort stations, etc., and properly regulating



Norway maples planted three years ago on the Seven Mile Road.

all encroachments, it can be truly said that we are rapidly approaching a standard of perfection in the appearance of our roads.

It has been demonstrated by our past experience that practical and economical results have been produced, and it is our intention to continue this work in all of its various phases as public needs require.

Producing well-kept, proper-appearing roadsides, and providing for the comfort, safety, and convenience of the traveling public, constitute the final improvements necessary for perfect road maintenance.

Highway Planting

Approximately 7000 trees were planted during the past year, covering 58 miles of county roads. This planting includes the following roads: Phoenix Road, from Northville Road west to the County Line; Five Mile Road, from Telegraph west to the Northville Road; Farmington Road, from the Seven Mile Road south to the Plymouth Road; Telegraph Road North, from Grand River Road south to Michigan Road; Middle Belt Road, from Plymouth Road south to Michigan Road; Wayne Road, from Plymouth Road south to Village of Wayne; Wayne Road, from Village of Wayne south to Huron River Drive; Huron River Drive, from French Landing east and south to the Village of Flat Rock; West Road, from Telegraph Road to Village of Trenton; and Seven Mile Road, from Harper Avenue to Grosse Pointe. In addition to this, all dead trees were replaced in plantings previously made.

The usual standard of high quality and dependable trees were planted, including Red Oaks, Pin Oaks, American Elms, Sugar, and Norway Maples. Special attention was given to soil requirements, drainage, landscape considerations, and location with reference to traffic. The size of trees planted averaged $2\frac{3}{4}$ inches in diameter. We have found that a tree of this size is the most economical to plant, and that considerable shade is produced in a remarkably short time.

Our usual maintenance of trees has continued. Each tree is cultivated continually during the summer months, and spraying, mulching, trimming for form is practiced at the proper times during the year. Our total loss of trees planted has not exceeded 10 per cent, proving the worth of systematic and continuous maintenance.

It is planned in the future to continue our highway planting until every improved road is lined with trees, and replacements will be made from year to year as needed.

Trimming

Rapid and efficient work has been produced by our trimming crews during the past year. Their years of experience and training have resulted in completed jobs of first quality. The larger part of last year's work consisted of obtaining proper clearance on new roads, intersections, and railroad crossings, and clearing away results of storm damage.



Sightly trees properly trimmed and cared for on the Wayne Road North.

Considerable trimming has also been done by request from villages and public utility companies. In addition to this, however, trees were trimmed on the following roads: Phoenix Road, from Northville Road west to the County Line; Beck Road, from Phoenix Road north one mile; Telegraph Road, from Five Mile Road north to Grand River Road; Ford Road, from Middle Belt Road west three miles; Wayne Road, from the Village of Wayne north two miles; and Vernier Road, from Mack Road east to Jefferson Avenue.

Trees at the following intersections and railroad crossings were also trimmed: Telegraph Road and Five Mile Road; Wayne Road and Plymouth Road; Middle Belt and Plymouth Roads; Emerson and Plymouth Roads; Ecorse and Telegraph Roads; Fort and West Roads; Fort and Huron River Drive; P. M. R. R. and Farmington Road; D. U. R. and Ford Road; P. M. R. R. and Plymouth Road; Wabash R. R. and Ecorse Road; Michigan and Middle Belt Roads; Michigan and Emerson Roads; Penn. R. R. and Huron River Drive; and Penn. R. R. and Middle Belt Road.

Regular trimming, practical repair work and emergency trimming such as mentioned above will be continued in the future.

Spraying

The trees on Vernier Road were sprayed again last spring for oyster shell scale. Considerable reduction in the numbers of this scale insect has been observed, and it is estimated that after a few more applications it will be eradicated.

A serious outbreak of the elm bark louse was noted on the Plymouth Road west of Plymouth last fall. All trees on this road at the above location were sprayed with oil emulsion. With continued applications, it will be possible to completely control this insect. If left without care, however, an infestation such as this, would in a few years completely destroy a number of small elm trees.

All young trees, planted by this Board, are sprayed twice each year. One application is for leaf-eating insects and the other is for scale insects. By taking this precaution, it is practically impossible for an outbreak to occur which would cause serious damage. As a result of this, all of our trees are kept in a continuous healthy and thrifty condition.

This program will be carried out from year to year, with special attention given to unusual situations.

Road Intersections

More than 6500 shrubs were planted last year to improve the appearance of parkways and road intersections. Approximately 6 acres of this ground was also seeded. It has been found that a mixture of one-third each of Kentucky blue grass, red top, and white clover seed makes the best combination of grass seed for average use. This mixture is varied, according to the type of soil encountered.



Trees sprayed, trimmed and properly preserved add beauty to our road system.

The following intersections and parkways have been graded, seeded, and planted with low-growing shrubs during the past year: Sumpter and Willow Roads; Middle Belt Road and Huron River Drive; River Road, two miles east of Rockwood; Allen and Ecorse Roads; Middle Belt and Romulus-Nankin Townline Roads; Middle Belt and Plymouth Roads; Five Mile and Plymouth-Livonia Townline Roads; and parkway on Michigan Road, from Emerson Road west approximately one-half mile, including parkway at retaining wall along the Rouge River.

In all of these locations, the grass is kept mowed, and the shrubs cultivated, sprayed, mulched, and watered. These small parks are useful as well as being a pleasant addition to the landscape, in that they afford a place for the motorist to stop, lunch, change tires, rest, etc.

The following intersections will be similarly improved during the coming year: Fort and Sibley Roads; Telegraph and Taylor-Dearborn Townline Roads; and intersection at the junction of Division, Allen, and S. Dearborn Roads.

Roadside Comfort Stations

Last fall, two roadside comfort stations were completed, their locations being on the Five Mile Road at Phoenix Park and on the Willow Road at Huron River Park.

Only a few weeks ago, two more of these buildings were completed, one at the junction of Huron River Drive, Belleville and Sumpter Roads, and one at the junction of Telegraph and the Redford-Dearborn Town Line Road.

These buildings are constructed of stone and brick, and are practically fireproof. Nothing has been spared to give the public every form of modern convenience. Each structure is equipped with a separate compartment for men and women, with an additional room for shelter and information.

The last two buildings constructed have a special ladies' rest room which is comfortably furnished. In each case, electric lights, public telephone, steam heat, and both hot and cold running water have been installed. The water in each building is tested each week by the Detroit Department of Health.

Thousands of people, including visitors from many foreign countries, have entered their names in the guest books of these various comfort stations. Innumerable requests for additional buildings, and favorable comments regarding those already completed, convince us that they are really a necessity. In view of this increased demand, it is planned to continue the construction of these comfort centers at locations where they will best serve the greatest number of people.

Sodding

More than 16,000 square yards of sod have been laid since September 1, 1924. This work, being inexpensive to perform, has resulted in



Ann Arbor Road west of Plymouth, showing the preservation of matured trees along the roadside.



Wayne Road, showing beautiful row of maples recently trimmed and preserved.

the saving of thousands of dollars which might have been otherwise spent in maintaining banks against washouts. In addition to this, it gives our bridges and grade separations a distinctive natural setting immediately upon completion of the work. All sodded slopes are kept closely trimmed, producing a perpetual neat appearance.

Sod was placed at the following locations during the last year: Slopes on Telegraph Road, just north of Michigan Road; slopes on Plymouth Road, both east and west of the Village of Plymouth; shoulders on Five Mile Road, near Phoenix Park; D. & I. R. R. and Eureka Road Grade Separation; heavy cut through cemetery on Grand River Road, just southeast of Redford; Penn. R. R., and Ecorse Road Grade Separation; Penn. R. R. and Eureka Road Grade Separation; Bridge No. 821304 on Middle Belt Road; and heavy cut on Waltz Road in Village of New Boston.

It is intended to continue sodding in the future on all grade separations, bridges, and various other places where necessary.

Public Utility Companies

Credit is due all public utility companies operating in Wayne County for their cooperation in locating poles, forming joint lines, and trimming trees. It can be justly said that the past year has been most successful in this respect.

Written permits are obtained from this Board for the placing of poles on improved roads, and similar permits are issued covering the trimming or removing of trees to facilitate the proper maintenance of lines. Our tree trimming specifications are closely followed, and all work is thoroughly inspected.

During this last year, 105 tree-trimming permits, 25 tree-removal permits, and 51 pole permits were issued. It is our intention to continue this in a similar manner in the future, maintaining complete and thorough inspection of all proposed work before permits are issued, and likewise following up the permits as the various jobs are being done.

Purchase and Condemnation of Right of Way

WIDENING operations have continued during the past year, where necessary. This is carried on with the idea of conforming with the plans of the Rapid Transit Commission of the City of Detroit. This calls for a maximum width of 204 feet on the superhighways and 120 feet on other main traveled roads, particularly section highways. It has been necessary to acquire right-of-way during the past year on Allen Road, Middle Belt Road, Ann Arbor Road, Michigan Road, Fort Road, and Grand River Road.



Michigan Road at Wayne, showing the new strip of pavement starting to utilize the 204-foot Super-Highway right-of-way.

On the Allen Road, property was acquired to open up what was formerly the Reeck Road, southeasterly to connect with Town Line Road between Ecorse and Taylor Townships.

All of this property was acquired by negotiation at a price of \$1500.00 per acre, excepting one parcel.

The owner of this parcel refused to accept the standard figure, because it was claimed that owing to his location, he was entitled to special damages extremely higher than the rest of the owners of property through which the proposed road was laid out.

Accordingly, it was necessary to start a condemnation case to acquire the necessary land, which was tried before a commission of three; the award was about \$2500.00 per acre for the land taken, plus a small amount for a leasehold interest, a total of \$8110.00, for 2.806 acres. The entire cost for right-of-way on this project was \$28,054.77.

This was entirely new right-of-way, 106 feet wide for a distance of 6877 feet, being a total average of 15.39 acres.

On the Middle Belt Road at the Eight Mile Road, which is the county line between Wayne and Oakland Counties, it became necessary to cut a triangular parcel off of the northeast corner to eliminate a jog in the Middle Belt Road in connecting with the same road in the next county.

The amount of land to be taken in this instance was 0.092 acres, but the transaction was somewhat complicated by reason of a frame residence situated near the corner.

We were unable to agree with the owner of the property as to the damages to be paid, and it became necessary to institute condemnation proceedings.

In this instance, the case was tried before a three-man commission, who awarded damages in the sum of \$600.00.

On Ann Arbor Road, which is a part of Federal aid project, including the Plymouth Road, owing to certain demands of the Federal Government, it was deemed advisable to secure a relocation.

The Golden Road, south of Plymouth Road, running east and west, was decided upon as the logical route.

A new right-of-way was necessary at both the east end, connecting with the old Plymouth Road, and the west end, to connect with the old Ann Arbor Road. Right-of-way was secured 120 feet in width for a distance of 30,691 feet in all, at a total cost of \$24,210.69.

On Michigan Avenue Road, between Dearborn and Wayne, the D. U. R. in times past has secured a private right-of-way, which with a few exceptions, is 33 feet in width. As Michigan Avenue Road has been laid out by the Rapid Transit Commission as a super-highway 204 feet in width, we undertook to conform with this plan, and attempted to obtain by negotiation the necessary land, which with the 33 feet of railway right-of-way, would total a width of 204 feet. The plans were so made that the right-of-way, when secured, would throw the private right-of-way of the D. U. R. into the center of this proposed new road.



Intersection of Middle Belt Road and Huron River Drive. Middle Belt Road is now completed from this point to the North County Line, and Oakland County is connecting it with Grand River Road near Clarencerville.

We attempted to secure the necessary right-of-way by negotiation, but after proceeding along that line, we found that about half the owners declined to settle at a reasonable figure; consequently, condemnation proceedings were instituted, and the case was tried before a twelve-man jury.

The proceedings were bitterly contested by some of the respondents, and nearly eight weeks were consumed in taking testimony before the case finally went to the jury.

On the land involved in the suit, our appraisal was around \$100,000.00, and the jury's verdict was \$145,241.44. This case involved the moving of a considerable number of residences, store buildings, and other structures; some of these were moved and some had to be torn down entirely.

There were 80 buildings affected in this manner. The total cost of the entire widening project, including moving and wrecking of buildings and the property acquired by condemnation over a distance of 6.24 miles, was \$299,429.35.

On Fort Road extension, south from Sibley Road, the bulk of the property was acquired last year. The remainder has now been acquired on the entire road, and the entire right-of-way is now available.

On Grand River Road, from Mill Street in the Village of Redford, northwesterly to the Seven Mile Road, we have undertaken to widen.

This will be 106 feet in width from Mill Street to the Berg Road, and from Berg Road out, the regulation 204 feet.

At the last session of the legislature, legislation was enacted permitting the acquiring of right-of-way in certain cases, by securing land off the actual line of the highway and setting the business frontage upon it.

We are following this plan on Grand River Road, as practically the entire frontage from Berg Road to the Seven Mile Road is subdivided into 20-foot lots, averaging 100 feet in depth. By securing the land behind and replatting to set these lots back, we expect to realize a very considerable saving over the usual methods of widening.

While the work has been under way only a short time, good progress is being made, and there is every indication that the property will be acquired as planned.

Mt. Clemens Drive has been laid out as a new route from Detroit to Mt. Clemens. It is a continuation of Harper Avenue, and comes off near the Seven Mile Road.

All of the land was dedicated for this project without charge, except one small piece on the Vernier Road.

In this instance, the new road cut less than 100 feet from the south line of the property, which would have constituted a special damage of somewhat serious nature.

Consequently, we agreed to purchase sufficient land to give 100-foot depth for the property on the south side of the road, which we obtained for \$900.00. The total amount of right of-way was 2.173 miles, 106 feet in width.



Bridge over Huron River south of New Boston. Side view showing the massive steel and concrete work.

Grade Separations

Under the grade separation law, we are obligated to start suit within one year after the completion of a grade separation, to determine the damages caused to the abutting property owners by reason of the grade separation.

During the past year, we have instituted suits of this character: The Ecorse Road-Detroit & Ironton Railroad grade separation, the Eureka Road-Detroit & Ironton Railroad grade separation, and the Ecorse Road-Pennsylvania Railroad grade separation. These cases were all tried before a twelve-man jury.

In the case of the Eureka-Detroit & Ironton Railroad grade separation, our appraisal was \$5125.00, and the verdict was \$5125.00. In the case of the Ecorse Road-Pennsylvania Railroad grade separation, our appraisal was \$1777.00, and the verdict was \$3052.00. On the Ecorse Road-Detroit & Ironton Railroad grade separation, our appraisal was \$2200.00, and the appraisal of the respondents totaled over \$90,000.00. The verdict of the jury was \$2200.00.

Bridges

WE can now say with a clear conscience that we are on top of the bridge situation on the county roads of Wayne County, for with the completion of this past year's program, all of the inadequate structures have either been replaced by modern bridges or the situation has been relieved by the construction of an additional bridge for a second strip of pavement.

In some of these latter cases, the old bridge accommodating the first strip of pavement will have to be replaced, because such structures were, in general, constructed before the days of heavy motor trucks, and were not designed for present-day needs.

Aside from such replacements, our future program will be such as to take care of bridges encountered on new roads taken over from time to time for improvement as county roads, and will also include the widening of present bridge structures as traffic conditions may require.

The construction activities during the year are recited in the following pages in detail for each bridge, but the extent of such activities can be realized from the fact that exclusive of the Dix bascule bridge reconstruction and of grade separation activities, we have been engaged in the construction of 15 bridges during the past year.

The construction of 7 of these bridges was started in 1924, and of the other 8, this past year. Four of these bridges are now completed, and 9 more are open to highway traffic and practically completed except for handrails, sodding, and cleaning up—the construction of the two remaining is now well under way.

It is appropriate at this time that we glance backward at a task in the completion of which we take some pride. About seven years ago, we earnestly set about the task of replacing all inadequate bridges on our county roads by modern structures.

Our policy has been to use the old structures as long as possible, and to replace them with the least possible inconvenience to the traveling public.

Since the construction season of 1918, we have built 47 modern bridges, which number includes the Dix bascule bridge reconstruction and two other large bridges now under construction. The following is the list of these bridges:

BROWNSTOWN TOWNSHIP:

1. River Road at Brownstown Creek.
2. Fort Road at Brownstown Creek.

CANTON TOWNSHIP:

3. Canton Center Road over branch of Rouge River, 1 mile north of Michigan Road.

DEARBORN TOWNSHIP:

4. Warren Road over Rouge River at Detroit's Rouge Park.
5. Michigan Road over Rouge River at Dearborn.
6. Telegraph Road over branch of Rouge River, north of Warren Road.
7. Telegraph Road over branch of Rouge River, north of Michigan Road.
8. Division Road over Rouge River, near junction of Allen and So. Dearborn Roads.
9. Ford Road over Rouge River, 1 mile west of Emerson Road.

ECORSE TOWNSHIP:

10. Fort Street Bascule Bridge over Rouge River.
11. Jefferson Avenue Bascule Bridge over Rouge River.
12. Ecorse Road over Ecorse Creek, at Ecorse.
13. Schaeffer Road over Rouge River, at junction with So. Dearborn Road.

HURON TOWNSHIP:

14. Willow Road over Huron River at Huron River Park.
15. Willow Road over County drain at Willow.
16. Waltz Road over County drain, at Willow.
17. Waltz Road over Huron River, at New Boston.

LIVONIA TOWNSHIP:

18. Wayne Road over middle branch of Rouge River, $\frac{1}{2}$ mile south of Plymouth Road.
19. Farmington Road over branch of Rouge River, north of Seven Mile Road.
20. Farmington Road over Bell Branch of Rouge River, $\frac{1}{2}$ mile north of Five Mile Road.
21. Ann Arbor Road over Rouge River, near junction with Plymouth Road.
22. Middle Belt Road over branch of Rouge River, between Five and Six Mile Roads.
23. Middle Belt Road over branch of Rouge River, between Six and Seven Mile Roads.

MONGUAGON TOWNSHIP:

24. Elizabeth Park Drive over creek at park entrance.
25. River Road over Monguagon Creek, near entrance to Grosse Ile.

NANKIN TOWNSHIP:

26. Wayne Road over Tonguish Creek, $1\frac{1}{4}$ miles south of Plymouth Road.
27. Middle Belt over Lower Rouge River, near Michigan Road.
28. Middle Belt over Middle Branch of Rouge River, near Warren Road.

NORTHVILLE TOWNSHIP:

29. Northville Road over River Rouge, north of Seven Mile Road.
30. Northville Road over River Rouge, north of Phoenix Road.
31. Northville Road over River Rouge, south of Waterford Road.
32. Northville Road over River Rouge, south of Five Mile Road.
33. Northville Road over River Rouge, north of Waterford Road.

PLYMOUTH TOWNSHIP:

34. Northville Road over Rouge River, at Ford Dam.
35. Plymouth Road over Rouge River, $\frac{1}{2}$ mile east of Plymouth.
36. Northville Road over Rouge River, just north of Plymouth.

REDFORD TOWNSHIP:

37. Grand River Road over Rouge River, at Redford.
38. Seven Mile Road over Rouge River, at Redford.
39. Plymouth Road over Rouge River, 1 mile east of Telegraph Road.



Bridge over Monguagon Creek on the River Road south of Wyandotte. This bridge provides for the new 63-foot pavement which is to be built in 1926.

40. Telegraph Road over Bell Branch of Rouge River, south of Five Mile Road.
41. Five Mile Road over Rouge River, east of Telegraph Road.
42. Five Mile Road over branch of Rouge River, west of Telegraph Road.
43. Five Mile Road over Bell Branch of Rouge River, 1½ miles east of Middle Belt Road.

SPRINGWELLS TOWNSHIP:

44. Michigan Avenue over Chovin Creek, in Springwells.
45. Dix Road Bascule Bridge over Rouge River.

VAN BUREN TOWNSHIP:

46. Belleville Road over Huron River, at French Landing.
47. Belleville Road over Huron River, at Belleville.

These bridges include 3 bascule bridges and 6 arch bridges; 32 concrete bridges and 15 steel bridges; 38 bridges of deck type (capable of being widened) and 9 of semi-through type; 28 with sidewalks and 19 without; 1 bridge with roadway sixty feet wide between curbs, 1 fifty-eight feet wide, 2 fifty-six feet wide, 1 forty-six feet wide, 5 forty feet wide, 1 thirty-six feet wide, 13 twenty-eight feet wide, 6 twenty-seven feet wide, 13 twenty-four feet wide, 1 twenty feet wide, 1 twenty-eight feet wide for second strip of pavement, and 2 twenty-four feet wide for second strip of pavement.

The aggregate cost of these bridges, including an allowance to complete those under construction, has been about \$4,960,000.00, of which: \$3,000,000.00 was raised by County bond issues (for the three bascule bridges); \$1,100,000.00 has been paid in rewards by the State and Federal Government (including amounts still due); \$100,000.00 was contributed by other interested parties; and \$760,000.00 has come out of County Road Funds.

In addition to these forty-seven bridges, two have been built by the State Highway Department at the County Line, towards which we have contributed financially, the first at the Telegraph Road crossing of Huron River at Flat Rock, and the second at the River Road crossing of Huron River at Rockwood.

Prior to 1918, eleven bridges had been constructed by us in the County. Five of these were in territory since taken into the City, and have been replaced by large city sewers. Three others have had their capacity doubled by building a second bridge and second strip of pavement.



New bridge on River Road south of Trenton across Brownstown Creek. This bridge provides a 40-foot roadway with sidewalks.

Bridge at Mile 0.7 River Road

This bridge, which is of reinforced concrete T-beam and slab construction, having a span of 31 feet and a 24-foot roadway, with one 6-foot sidewalk in addition, is an example of the expansion of bridges to meet traffic requirements. This bridge is built to supplement an existing bridge at this point, and the new bridge carries the second strip of pavement involved in the double strip highway now under construction at this section of River Road.

During the construction of this second bridge, highway traffic was cared for over the existing strip of pavement and its bridge.

While the bridge was practically completed in the 1924 season, there has been an expenditure of \$741.42 during the past year to cover small details of construction incident to its final completion, which has now been accomplished.

Bridge at Mile 7.2 River Road

Those who can recall to mind the narrow and extremely dangerous bridge which existed at this crossing of Brownstown Creek, prior to the construction of the present bridge, will appreciate the strides that are being taken in procuring adequate bridge structures for the rapidly increasing volume of highway traffic in Wayne County.

The new bridge, whose construction was started in the 1924 season, has now been completed. It is a reinforced concrete T-beam and slab bridge of 40-foot span, and having a roadway 40 feet wide between curbs and two 5-foot sidewalks, and crosses the river on a sharp skew. The bridge conforms to the program of widening the pavement on River Road to 40 feet.

In view of the extremely heavy traffic on River Road, it was necessary to construct a detour, which included a pile trestle bridge about 500 feet long. The detour was commodious, and was illuminated by a special gasoline power plant.

The expenditure on this bridge during the past year was \$1733.56.

Bridge at Mile 1.7 Division Road

In view of the importance of this highway, and of the great volume of traffic which will make use of it when completed, this bridge at its crossing of Rouge River, near the outskirts of the Village of Melvindale, has been built with a 40-foot roadway and two 6-foot sidewalks.

The bridge, which consists of three skewed spans of reinforced concrete T-beam and slab construction, each 44 feet long, is capable of being



Former bridge at Ecorse Road over Ecorse Creek.



This bridge has replaced the one shown in the above picture.

widened if the future so requires. The abutments and piers are supported on 40 and 45-foot piles.

The construction of the bridge proper is now completed, but the ornamental spindle handrail has not yet been placed.

The expenditure on this bridge during the past year was \$83,765.93.

Bridge at Mile 0.0 Ecorse Road

During the past year, we have completed this bridge, the construction of which was started in 1924. It replaces a dangerously light and narrow steel bridge, and corrects a very bad condition.

During the construction operations, a local detour was constructed, and the old steel bridge was moved bodily to serve as a temporary bridge on this detour.

The new bridge is of a type which is capable of future widening, and consists of two spans, each 35 feet long, of reinforced concrete T-beam and slab type. The roadway is the same as that of the street approaching the bridge in the Village of Ecorse, namely, 36 feet between curbs, and two 6-foot sidewalks are also provided on the bridge.

Our expenditures during the past year at this bridge were \$22,448.13.

Bridge at Mile 0.2 Waltz Road

The construction of this bridge was initiated in 1924 and is now complete.

The bridge crosses the Huron River at a sharp skew, and consists of two pony truss spans, each 100 feet long, with a roadway 27 feet wide and two 5-foot sidewalks.

Because of the prohibitive cost of a detour and temporary bridge and the light volume of highway traffic involved, no detour was constructed for vehicular traffic, but a temporary foot-bridge was built to serve school children.

The expenditure on this bridge during the past year was \$67,551.08.

Bridge at Mile 0.2 Ann Arbor Road

At this crossing of the Rouge River, near Newburg, a reinforced concrete, earth-filled arch bridge, with a span of 70 feet and a rise of

14 feet, has been built. Its construction was started in 1924 and is now complete, except for the placing of an ornamental concrete spindle handrail.

The bridge provides a 28-foot roadway and two 6-foot sidewalks, and is so arranged that it can be readily expanded to provide a 40-foot roadway.

Our expenditures during the past year at this bridge have been \$4,941.77.

Bridges at Mile 7.3 and 7.7 Middle Belt Road

Both of these bridges were started in the 1924 season, and with the exception of the construction of ornamental handrails, they are both complete and open to traffic.

These bridges replace narrow and light steel highway bridges which had served the traffic prior to the paving of this road, and which would have constituted death-traps after opening the new pavement to highway traffic.

The new bridges are reinforced concrete of T-beam and slab type, and are capable of being widened, if necessary, at a future date. They provide a roadway 28 feet wide between curbs, and two 5-foot sidewalks.

The first bridge crosses a branch of the Rouge River with two 35-foot spans.

The second bridge crosses a second branch of the Rouge River at a sharp skew and has a span of 35 feet.

Our expenditures during the past year on these bridges have been as follows:

Bridge at Mile 7.3—\$22,821.36.

Bridge at Mile 7.7—\$15,184.95.

Bridge and Road Relocation at Belleville Road, Mile 4.5

At this crossing of the Huron River, at the Village of Belleville, a dangerous combination of narrow highway on high fills, steep grades, two right-angle turns, and light and narrow highway bridges has been corrected.

The immediate necessity for the relocation of this section of road, which is about a quarter of a mile long and which included two high-

way bridges, was created by the proposal of the Detroit Edison Company to construct a dam downstream to raise the water in the pond so created to a height which would submerge the old roads and bridges.

A large part of the cost of the relocation has accordingly been paid for by the Detroit Edison Company, who were obligated to pay for the replacement at the higher level of a road and bridges of at least as good type and capacity as those existing.

Taking advantage of this circumstance, we have greatly increased the capacity of the new road and bridge, and have eliminated all sharp turns and grades. The former bridges have been replaced by one bridge of pony truss type and of 120-foot span, having a 27-foot roadway and two 5-foot sidewalks.

The extremely high fill, which involved approximately 100,000 cubic yards of earthwork, is still in process of settling and consolidating, and therefore, while all other ends of the construction are now completed, a temporary pavement must serve until 1926, when it will be safe to complete our proposed 27 foot concrete pavement on this new location. At that time by appropriate sodding and planting, our forester will make of this bridge approach, a unique feature.

The cost of the work during the past year was \$86,048.99; the Detroit Edison Company contributed \$87,000.00 of the cost of the whole improvement.

Bridge at Mile 14.4 Fort Road

With the improvement of Fort Road and the laying out of its extension, a new crossing of Brownstown Creek required the construction of a bridge.

The bridge, which is a concrete T-beam and slab bridge, has a span of 35 feet, and provides a 40-foot roadway and two 6-foot sidewalks.

The bridge is now completed, except for the construction of its ornamental concrete handrails.

This bridge is another example of the effort to meet traffic requirements in bridge structures.

To date, our expenditures on this bridge have been \$15,031.40.

Bridge at Mile 4.7 Ford Road

In connection with the improvement of Ford Road, it has become necessary to replace the former bridge at this crossing of the Rouge River, which was a very narrow and light steel bridge of three spans.



The bridge at Belleville Road crossing of Huron River. The Detroit Edison Company's dam at French Landing will raise the water to the level of the band of rocks on the approach fill.



The new bridge across the Huron River at New Boston during the flood which occurred when the dam at French Landing failed.

To conform to our present plan for the development of Ford Road, the new bridge has a roadway 40 feet wide between curbs, and it also provides two sidewalks, each 6 feet wide. The bridge crosses the river at a sharp skew, and this, combined with almost 20 feet of variation in water level and a tendency to scour in periods of high water, has necessitated extensive foundations.

The new bridge is of the deck-plate girder type of two spans at 75 feet, with reinforced concrete roadway and sidewalk slabs. This type is capable of being widened should the future require it.

Its appearance upon completion, surmounted by an artistic concrete spindle handrail, will be in keeping with the high standard which we have set for ourselves in such structures.

Construction of the bridge was started in December, 1924, but a series of difficulties met in the construction of the foundations has delayed completion of the bridge. All such difficulties have now been surmounted, and the bridge will be in condition to receive traffic this fall.

Our expenditure during the past year on this bridge has been \$54,474.03.

Bridge at Mile 0.0 Schaeffer Road

This crossing of the Rouge River is of inestimable importance in the rapidly developing Rouge industrial district, and the boundaries of the Cities of Detroit and Springwells and of the Village of Melvindale adjoin on the bridge.

A narrow pile trestle bridge which formerly existed at this crossing, was wrecked by ice during the spring freshet this year.

In view of the peculiar location of this bridge, under the joint jurisdiction of three municipalities, and in view of the importance of this crossing as a link between our South Dearborn Road and Schaeffer Road in Springwells, and because of the urgent necessity for its immediate reconstruction, we at once sought and obtained jurisdiction over the bridge and requested a permit from the War Department to reconstruct a fixed bridge at this crossing.

Immediately upon receipt of the permit, our plans were drawn up in detail, and the work of reconstruction is now under way.

The new bridge will represent our most advanced step in highway bridge construction, insofar as adequacy to meet the volume of highway traffic is concerned.

It will provide for the full width of the paved highways on either side, with the foundations for a bridge 80 feet wide over all, accom-

modating two separate highway bridges, each having a 21-foot roadway and a 10-foot sidewalk on the outside. The 18-foot center strip of the bridge superstructure, between these two highway bridges, will be omitted from the present construction, and can be placed at a later date when street car tracks are extended to this point.

The bridge is a deck reinforced concrete structure of T-beam and slab type, with three spans at 46 feet, and is readily adaptable to future widening.

With the nearest bridge (Dix Bridge) downstream from this crossing out of commission because of its reconstruction at the order of the War Department, and with the nearest bridge (Division Road Bridge) upstream not yet completed, and with no improved roads on which to divert traffic, highway traffic has been seriously and unavoidably inconvenienced.

With the cloudburst of August, this condition amounted to a practical tie-up of traffic southbound from the Ford Rouge plant, when the Miller Road crossing of Baby Creek in the City of Detroit was washed out.

To relieve this situation as far as was in our power, upon completion of our Division Road Bridge, we constructed a temporary stone road to detour traffic from Schaeffer Road over to the Division Road Bridge and out to Oakwood Boulevard.

Our expenditure to date on this bridge has been \$7,543.02.

Bridge at Mile 2.8 Middle Belt Road

This bridge crosses a branch of the Rouge River just north of Warren Road.

Numerous accidents at the narrow steel bridge which heretofore existed at this crossing, and the rapid increase in highway traffic on this road after being paved, made it imperative that the old bridge be replaced by an adequate and modern structure.

Because of the necessity that highway traffic be safely and adequately served during the reconstruction, our own picked forces were used to rebuild this bridge. Their first step in the reconstruction was to build a temporary bridge and a macadam detour road immediately adjacent to the crossing.

The new bridge is a reinforced concrete deck structure of T-beam and slab type of two spans at 40 feet, and provides a roadway 28 feet wide between curb lines and two 6-foot sidewalks. This type of bridge easily permits of widening when necessary.

The new bridge is now complete, except for the construction of an ornamental concrete handrail, which will be completed in the near future.

Our expenditure during the past year on this bridge was \$37,377.51.

Bridge at Mile 8.6 Grand River Road

In connection with the widening of Grand River Road, this bridge, crossing the Rouge River near Redford, has been constructed to take the new strip of pavement on the north side of the electric railway.

The bridge is a reinforced concrete deck bridge of T-beam and slab type, and consists of two spans, each 38 feet long. It has a roadway 28 feet wide, and one 10-foot sidewalk on the outside of the highway.

This second bridge and the new strip of paving will relieve a seriously congested condition.

The bridge is now complete, except for the construction of an ornamental concrete handrail.

Our expenditure during the past year on this bridge has been \$11,722.29.

Bridge at Mile 7.5 Five Mile Road

At this crossing of a branch of the Rouge River, a dangerous condition of a narrow and light steel highway bridge, located off the center of the concrete road, has been corrected by the construction of a modern reinforced concrete bridge.

The new bridge, which is now completed, except for its handrails, crosses the river at a sharp skew and consists of two spans, each 35 feet long of T-beam and slab type, and provides a 28-foot roadway and two 5-foot sidewalks.

Here, because of the heavy highway traffic, the reconstruction was carried out using our own forces in order that the safety and convenience of the public would be assured. A temporary bridge was constructed adjacent to the old bridge, and a short stone detour was constructed to serve the traffic.

The bridge is now completed, except for the handrails, which will be in place in the near future.

Our expenditures during the past year at this bridge have been \$39,501.95.



When the ornamental spindle handrail has been completed on this bridge, it will be worthy of its beautiful setting. This bridge is on the new extension of Fort Road.

Bridge Maintenance and Other Expenditures

Maintenance of bridges includes among other things, repainting of steel bridges, repairing of wearing surface of floors, repointing of masonry work, repairing damages done by flood waters, beautifying approaches, and repairing damages occasioned by collisions, etc. For such maintenance, exclusive of work of bascule bridges or on grade separations, we have expended \$447.84 during the past year.

We have also expended \$180.99 on plans for future bridge construction, and have made the following expenditures involved in closing out accounts on bridges already built:

| | |
|--|----------------|
| Bridge at Mile 5.3 Wayne Road..... | \$ 607.57 |
| Bridge at Mile 17.3 Telegraph Road..... | 1,852.64 |
| Bridge at Mile 0.1 Middle Belt Road..... | 80.36 (Credit) |
| Bridge at Mile 14.3 Telegraph Road..... | 5.60 |
| TOTAL..... | \$2,385.45 |

Rouge River Bascule Bridges

THE inconspicuous Rouge River of the years prior to 1919, winding its way drowsily through useless, mosquito-infested marshes, has disappeared forever, and in its place in the short period of five years, has appeared a straight, deep waterway, which during the past year has borne commerce to the extent of 1,400,000 tons, in vessels of the very largest size traversing our Great Lakes System.

The ramshackle, narrow highway drawbridges and the old railroad drawbridges have, in the face of the demands of such navigation, disappeared in favor of modern bascule bridges.

In these few short years, the clatter of a few hundreds of horse-drawn vehicles, the crash of street cars operating at regular and short intervals, and the buzz of a few hundred automobiles crossing the old drawbridges, have all been replaced by the steady hum of many thousands of automobiles with an undertone occasioned by hundreds of busses, quietly rolling over commodious bascule bridges. Quiet as is this new and dense traffic, the very volume and insistence of its hum completely engulfs any sound from the occasional street car and the handful of horse-drawn vehicles.

This great river and highway traffic, however, introduces many new problems in the successful operation of the bascule bridges. Our bridge operators are all men who have grown up with these bridges and with this increasing traffic, and each of them feels a pride in his bridge and in its successful operation—without damage from on-coming boats, without accident to highway traffic, and with the least practical delay or inconvenience to such traffic.

It is no simple matter to stop such highway traffic to open a bridge. Imagine 6 lines of traffic, each carrying an automobile every 9 seconds, or 1 automobile per second and a half on the bridge—and you have a picture of the traffic involved at rush hours.

With a million-dollar bridge at stake and a vessel (with the legal right-of-way of navigation) steadily and fearlessly approaching, and with such heavy traffic to contend with, an operator must obey the War Department's orders, which are to the effect that when a vessel blows for a bridge, it must be opened immediately. Such vessels, even though moving slowly, cannot be stopped in a short distance.

So the operator must set about closing his gates to the traffic and raising his bridge—and, expert as he may be, he cannot avoid the fool who will crash the gates, or who will make a last-moment dash to cross the bridge.

It has occurred before now that, while attempting such dashes, the autoist has had cold feet and abandoned his car midway of the bridge. Under such circumstances, only quick action on the part of the operators avoids serious consequences.

Thus, it is apparent that, at times, a bridge may appear to have been opened to navigation and closed to heavy highway traffic for a longer time than necessary, but even so, the operator of the bridge may have done the best possible.

Dix Bascule Bridge

The former bascule bridge at this crossing of the Rouge was constructed prior to the improvement of the Rouge River, and in those days it spanned a stream of insufficient depth or regularity for any but inconsequential navigation. At that time, the great Rouge plant of the Ford Motor Company was in its infancy, and the mammoth expansion which extends from the very shadow of the bridge as far as the eye can reach, was inconceivable.

With the approval of the War Department, the first bridge was therefore built to provide a clear channel 100 feet wide over the river, as it then existed.

Later, the Ford Motor Company constructed at great expense a massive concrete dock, several thousand feet long, in line with the east abutment of our bridge.

When the War Department dredged the Rouge River to a bottom width of 200 feet and a top width of 300 feet, it therefore adopted the line of the Ford Motor Company's concrete dock as the east dock line for the top width of 300 feet, thus leaving our bridge on one side of the center of the new channel—the west end of our bridge did not then reach even to the center of the new channel.

At the time of improving the channel, the War Department did not require the removal of our bridge, but indicated that should our bridge become an impediment to navigation, we would be required to provide a channel of 125 feet wide as was being required at other bridges.

With the increase of navigation on the Rouge, and particularly with the use of the largest boats on the lakes, with lengths exceeding 612 feet and beams of $62\frac{1}{2}$ feet or more, the bridge created an impossible situation which involved a constant menace to navigation and the ever-present possibility that the bridge itself would be accidentally demolished by the larger boats.

The War Department thereupon ordered the bridge to be abandoned or to be rebuilt so as to provide a clear channel width of 125 feet located at the center of the 300-foot channel, setting July 1st, 1926, as the time for completion.

Accordingly, in June of 1924, the Board of Supervisors of Wayne County authorized that plans be prepared by us, and that a bond issue for \$1,000,000.00 be submitted to the electors in September of 1924 to defray the cost of construction.

After a favorable vote on the bond issue, and after the sale of the bonds and upon completion of detail plans, we received bids for the construction of the superstructure on December 30, 1924, and the contract was awarded to the low bidder, The Wisconsin Bridge & Iron Company of North Milwaukee, Wisconsin, at a price of \$340,822.08.

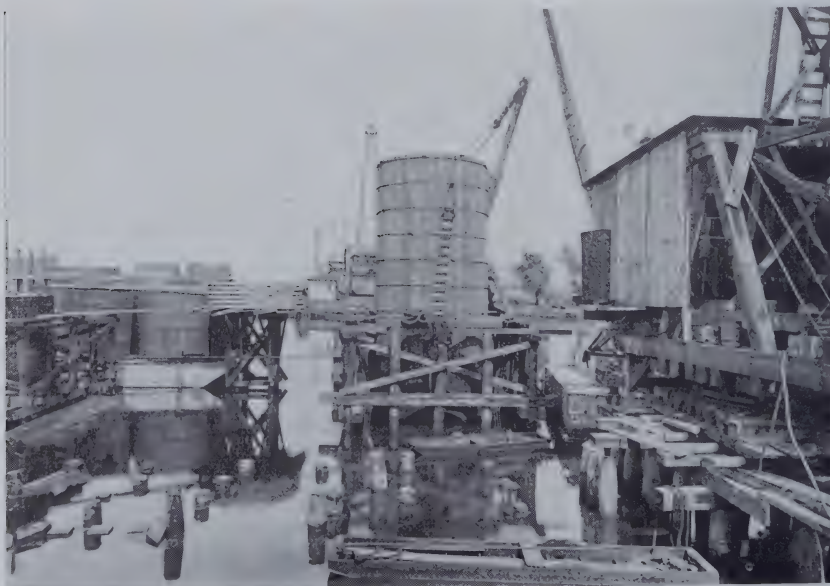
Bids for the substructure and foundation work were received April 21, 1925, and the contract was awarded to the Missouri Valley Bridge & Iron Company of Leavenworth, Kansas, who were the lowest bidder at a price of \$390,235.60.

Two other contracts for electrical equipment and for houses and architectural features are yet to be let when our plans therefor are completed.

The new bridge will be very similar to the Fort Street Bascule Bridge, and will provide for a roadway 56 feet wide between curbs and two 9-foot sidewalks.



This bridge is now completed with the exception of its handrailing, and will accommodate the new second strip of paving on Grand River Road near Redford.



We have started to sink pneumatic caissons for the foundations of the new Dix Bascule Bridge.

The very difficult work involved in constructing the massive foundations, supported on piers extending to rock almost 80 feet below water level, is now progressing favorably, and the superstructure of the bridge is being built at the shops of the bridge company.

The old bridge was raised on June 13, 1925, to permit dredging operations for the new foundation work, and the crossing became closed to highway traffic.

The expenses of maintenance and operation of the old bridge this year, prior to its abandonment, were as follows:

| | |
|--------------------------------|-------------------|
| Labor Operating..... | \$5,131.35 |
| Electric Power and Light..... | 123.00 |
| Miscellaneous Maintenance..... | 1,406.00 |
| TOTAL..... | \$6,661.25 |

The expenditures towards the construction of the new bridge during the past year have been as follows:

| | |
|---|---------------------|
| Engineering—Design and Field..... | \$ 16,077.33 |
| Blue Prints and Miscellaneous Expense..... | 2,297.89 |
| Shop and Mill Inspection..... | 15.00 |
| Property Acquired for Approaches..... | 48,216.23 |
| Property Surveys, Etc..... | 337.80 |
| Expenses on Old Bridge..... | 1,058.80 |
| Construction of Siding..... | 865.65 |
| Cement..... | 2,506.92 |
| Construction of Substructure of Bridge..... | 64,504.80 |
| TOTAL..... | \$135,880.42 |

Jefferson Avenue Bascule Bridge

The operation of this bridge during the past year has proceeded without incident worthy of note.

The bridge was operated 1068 times during the year for the passage of boats.

To show the steady increase in highway traffic we are repeating the tabulation made in our report last year and bringing this tabulation up to date:

The daily count is based on 14 hours, from 7:00 a. m. to 9:00 p. m.

| | Average per Day | Maximum Recorded Count for a 14-hour Day | Maximum Recorded for a two-hour Period |
|------|--------------------|--|--|
| 1918 | 2,628 (March) | 2,628 (Sat. March 23) | 503 |
| 1920 | 5,117 (October) | 5,360 (Sat. Oct. 16) | 974 |
| 1921 | 5,879 (August) | 6,108 (Sun. Aug. 14) | 1,433 |
| 1922 | 7,188 (August) | 7,338 (Wd. Aug. 30) | 1,545 |
| 1923 | 10,101 (May) | 12,171 (Sun. May 6) | 3,197 |
| 1924 | 12,155 (July) | 13,093 (Sat. July 12) | 2,626 |
| 1925 | 13,362 (July) | 13,628 (Fri. July 3) | 2,699 |

The traffic count this year was carried through 24 hours, and shows an average 24-hour count of 17,142, with a maximum of 18,151 on July 3. This count includes a daily average of approximately 120 street cars, 300 busses, 1600 trucks, 1200 foreign cars, and 80 horse-drawn vehicles.

The cost of operation and maintenance of this bridge during the past year has been as follows:

| | |
|---|--------------------|
| Labor—Operating..... | \$10,897.32 |
| Miscellaneous Materials..... | 550.98 |
| Electric Power and Light..... | 1,353.25 |
| Maintenance—Wood Block Floor..... | 13.23 |
| Maintenance of Other Paving..... | 404.66 |
| Maintenance of Machinery..... | 3.00 |
| Maintenance—Electrical Equipment..... | 471.32 |
| Maintenance—Structural Steel..... | 0.00 |
| Miscellaneous Maintenance..... | 1,065.32 |
| Maintenance—Protection Piling, Etc..... | 5.94 |
| Major Accidents..... | 3,724.05 |
| TOTAL..... | \$18,489.07 |

Fort Street Bascule Bridge

In order that the rapidity with which this bridge is becoming a great gateway of Detroit may be appreciated, we are repeating the traffic figures reported by us last year, together with similar figures for this past year.

| | Average per Day | Maximum Recorded Count for a 14-hour Day | Maximum Recorded for a two-hour Period |
|------|--------------------|--|--|
| 1918 | 879 (March) | 934 (Sat. March 23) | 180 |
| 1919 | 940 (July) | 940 (Sat. July 26) | 212 |
| 1920 | 2,427 (October) | 2,775 (Sun. Oct. 24) | 751 |
| 1921 | 3,311 (July) | 4,259 (Sun. July 31) | 947 |
| 1922 | 6,257 (August) | 8,849 (Sun. August 27) | 1,826 |
| 1923 | 7,401 (May) | 10,250 (Sun. May 6) | 2,220 |
| 1924 | 11,875 (July) | 15,344 (Sun. July 6) | 3,467 |
| 1925 | 19,645 (July) | 22,721 (Sun. July 5) | 4,520 |

The figures for daily count reported above are for 14 hours, from 7:00 a. m. to 9:00 p. m. This year, 24-hour counts are available, and it is shown that on July 5, 27,334 vehicles crossed the bridge—the average 24-hour count being 24,386. The figures also show that in the hour between 8:00 and 9:00 p. m. of July 5, 2451 vehicles crossed, which is at an average rate of a second and a half per vehicle.

Included in the average daily procession are 700 busses, 75 street cars, 1600 foreign cars, 1200 trucks, and 60 horse-drawn vehicles.

The bridge was raised 776 times during the year for the passage of boats.

The cost of maintenance and operation of this bridge during the year was:

| | |
|---|--------------------|
| Labor—Operating..... | \$10,918.58 |
| Miscellaneous Material..... | 492.80 |
| Electric Power and Light..... | 1,187.94 |
| Maintenance—Wood Block Floor..... | 13.23 |
| Maintenance of Other Paving..... | 254.41 |
| Maintenance of Machinery..... | .48 |
| Maintenance—Electrical Equipment..... | 307.60 |
| Maintenance Structural Steel..... | 22.50 |
| Miscellaneous Maintenance..... | 475.09 |
| Maintenance Protection Piling, Etc..... | 149.81 |
| Major Accidents..... | 84.66 |
| TOTAL..... | \$13,907.10 |

Grade Separations

WE have this year initiated construction activities on 5 new grade separations, 2 of which will be in condition to serve highway traffic this fall.

In addition, we have been engaged in the construction of 4 other grade separations started prior to this year, of which 3 are now completed and the 4th practically completed.

Each of these projects is described in detail elsewhere in this report.

Our first grade separation project was started late in 1922 and completed in 1923. The number of grade separations on which construction activities have been initiated by us has now reached a total of 14, of which 9 are now in use by highway traffic and 2 more will be in condition to serve traffic this Fall.



Grade separation—Pennsylvania Railroad and Eureka Road. Slopes sodded, wide concrete road and sidewalks help make a sightly and safe situation.

In addition, in pursuance to the orders of the Board of Supervisors at its meeting of October 1923, an agreement has been reached with the Michigan Central Railroad, The New York Central Railroad, and the Detroit and Toledo Shore Line Railroad in respect to the crossing of South Dearborn Road in River Rouge and the agreement is now in process of being signed by the various parties. Construction will be initiated this Winter.

We have also received assurance that the Michigan Central will agree that construction be started next year of a separation at its crossing of Division Road South of Michigan Avenue.

The Pere Marquette Railroad and the Detroit Terminal Railroad have tentatively agreed with us to start construction on a grade separation at the Michigan Avenue Road crossing in Springwells.

This will also involve the adjacent crossing of Miller Road. We are accordingly engaged in making a joint survey with the Railroads from which to arrive at plans suitable not only to the conditions involved at Michigan Avenue Road, but also at all the crossings of County roads between Michigan Avenue Road and Oak Station on the Pere Marquette Railroad.

The Pere Marquette Railroad has heretofore verbally agreed to join us on one other project in the coming year which will probably be at its crossing of Telegraph Road.

The Detroit and Ironton Railroad will also join us on another project next year the location of which cannot yet be decided on.

Without exception, we have found it possible up to date to negotiate grade separations with the various railroads without resorting to coercive measures.

The necessity for grade separations is apparent to all, and the railroads appreciate with us the fact that it is economical to separate the grades at the earliest possible date on our improved County roads, and that such economy is greatly augmented if the work is completed prior to the improvement of the adjacent property.

Furthermore, it is becoming recognized more and more that by providing grade separations at the important highways, the subdivision of adjacent property will be influenced by the presence of such grade separations in a manner tending to avoid a multiplicity of unnecessary additional grade crossings of the railroads.

Regardless of the method pursued in arriving at an agreement to separate grades with a railroad, whether by negotiation or by coercive measures, much time is unavoidably consumed in preliminaries and it is seldom possible to foresee when an agreement will be reached and construction started.

Circumstances do arise which may make it possible to arrive at an agreement quickly at crossings not under consideration in our formal program for the year. We feel that it is in the best interest of the County for us to take advantage of any such opportunity if the funds available to us can be stretched to cover the project until further funds are made available by the Board of Supervisors.

Our minimum requirements at grade separations are that a roadway not less than 40 feet wide between curbs with two 6-foot sidewalks in addition and a clear height above the highway of not less than 15 feet be provided. In cases where a center pier must be used, we require two road ways each 28 feet wide. The former with no-parking restrictions is equivalent in capacity to a highway 56 feet wide with parking permitted, and the latter is similarly equivalent to two 36 or 40 foot highways.

Grade Separation at Mile 0.3 Telegraph Road

Upon being advised by the Detroit, Toledo & Ironton Railroad of its intention to improve its line in the vicinity of this crossing of Telegraph Road at Flat Rock, by double tracking, and of its willingness to separate the grades at this crossing while their other construction activities were in progress, we agreed with them on the plans and terms for the work and its construction has recently been started.

The plans involve a raise in the railroad grade and a lowering of the highway grade to carry the highway under the railroad.

The grade separation will provide for two roadways each 28 feet wide, two sidewalks each 8 feet wide, and a clearance over the highway of 15 feet. The railroad bridge will be built for two tracks with foundations for four tracks.

A pier in the center of the highway and two sidewalk piers in addition to the abutments were required for the railroad bridge because of the very sharp skew at which the railroad crosses the highway and the extremely long spans necessitated thereby. The center pier will be well lighted to avoid possibility of accidents.

In order that highway traffic may be inconvenienced as little as possible we have leased property upon which we have constructed a tar-macadam road to serve, in connection with one of the streets of Flat Rock, as a detour during construction operations.

Natural drainage not being available, the subway will be provided with an appropriate pumping plant to pump the water into an adjacent County Drain.

The width of the grade separation has made it necessary that we acquire additional right-of-way and that several houses be moved. Most of the necessary land has now been acquired and the houses moved and construction of the grade separation proper is to be initiated this month.

Our expenditures to date on this project have been \$18,669.66.

Grade Separation at Mile 5.8 Telegraph Road

At this crossing of the Pennsylvania Railroad, the highway has been carried over the railroad on a bridge providing 28-foot roadway and two 5-foot sidewalks. The construction is such that it can be widened to meet future requirements. In addition to caring for the present two tracks of the railroad, provision is made for two future tracks.

The construction of this grade separation was practically completed in 1924 but during the past year certain details of construction were completed and the project is now finished. The suit to determine damages to adjacent property is in court now and the awards will be made in the near future.

Our expenditures at this grade separation in the past year have been \$939.47.

Grade Separation at Mile 1.4 Division Road

Construction activities on this grade separation with the Detroit & Ironton Railroad were initiated late last year at which time the contract for the substructure, drainage, grading and paving was let to W. E. Lennane of Detroit, and the contract for the superstructure of the bridge to McClintie-Marshall Company, of Pittsburgh.

It provides a subway for the highway having two roadways each 28 feet wide and 2 sidewalks each 8 feet wide with a clear headroom over the highway of 15 feet. The subway is adequately lighted electrically.

The railroad bridge will accommodate 4 tracks and the foundations will provide space for 2 additional future tracks.

Drainage is secured by a pumping plant and an outlet sewer to the Rouge River about $\frac{1}{4}$ mile away.

With the exception of cleaning up and sodding of slopes, the construction of the grade separation is now completed and we have been released from damages by Henry and Clara Ford—the owners of all abutting property.

Our expenditure on this project during the past year has been \$163,582.72, approximately 50% of this is reimbursed to us by the Railroad.

Grade Separation at Mile 3.6 Eureka Road

The construction of this grade separation was almost completed last year and has now been finished.

By raising the grade of the Detroit & Ironton Railroad about seven feet and by lowering the grade of the highway, a subway has been built



Grade separation completed at the D. & I. Railroad crossing of Eureka Road. This provides a 40-foot roadway with sidewalks.

which provides a 36-foot highway and two 6-foot sidewalks, having 14-foot clearance over the highway.

The subway which is drained by a pumping plant and discharge sewer to a nearby County Drain, makes provision for two railroad tracks.

Our expenditures during the past year on this project have been \$39,416.23, which includes an award of \$5,125.00 for damages to abutting property.

Grade Separation at Mile 4.2 Eureka Road

The construction of this grade separation at the Pennsylvania Railroad crossing was started last year and is now completed. The suit to determine damages to abutting property is in court and the awards will soon be made.

The railroad tracks were raised about 7 feet and the highway was depressed through a subway 36 feet wide between curbs, having two 6-foot sidewalks and 14 feet of headroom over the highway and providing for two railroad tracks. Drainage is secured by a pumping plant and sewer discharging into a near-by County Drain.

Our expenditures during the year on this project have been \$28,017.17.

Grade Separation at Mile 3.1 South Dearborn Road

Pursuant to the order of the Board of Supervisors in October of 1923, an agreement has been reached with the Pennsylvania and Wabash Railroads and the preliminary work involved in separating the grades has just been started.

This is the largest grade separation project yet inaugurated by us and, in view of the great importance of the new Division and South Dearborn Roads as an artery for traffic through the industrial districts of Detroit, Springwells, Melvindale and River Rouge, it is probably the most needed.

At this point the two railroads adjoin and, while there are at present only 6 tracks across the highway, each railroad owns wide right-of-way and has plans for extensive yards and other improvements involving future tracks.

We have therefore determined to build with adequate provisions for the future of both the highway and the railroads.

The tracks of the railroads will be raised somewhat and the highway will be depressed to provide for a subway for the highway.

The depression of the highway will be extended the full width of the combined rights-of-way of the railroads, thus involving a depression about $\frac{1}{2}$ mile long to include the approaches. Through this subway, a highway having a width of 82 feet between the outer edges of sidewalks will be provided, which will be carried under the railroad bridges by 2 roadways each 28 feet wide and 2 sidewalks each 8 feet wide. A clear headroom of 15 feet will be provided. The bridge will accommodate 6 railroad tracks and provisions are made for 6 future tracks.

In order to avoid building long and costly retaining walls, we are widening the right-of-way of the highway sufficiently to allow for side slopes outside of the 82 foot highway.

Drainage of the subway will be by means of a pumping plant and outlet sewer to an open county drain until such time as city sewers reach this vicinity.

In order to get ready for the construction of the grade separation proper we have already secured most of the right-of-way and have leased property upon which we are constructing a temporary concrete road to serve as a detour during construction.

Our expenditures on this project have been \$28,998.10.

Grade Separation at Mile 0.3 Wayne Road

Immediately upon receipt of the signed agreement with the Michigan Central Railroad we inaugurated construction of this project.

The width of the project required additional right-of-way which was acquired in such a location as to enable us to eliminate existing angles in the road.

To accommodate highway traffic during the construction we macadamized two of the adjacent streets of the Village of Wayne to serve as a detour.

The contract for the substructure, grading, drainage, etc., was awarded to D. W. Thurtson Co., of Detroit, and that for the superstructure to McClintic-Marshall Company, of Pittsburgh, Pennsylvania.

The tracks of the railroad were raised 4 feet, and the highway was depressed to pass under the railroad in a subway which will provide for two 24-foot roadways and two 6-foot sidewalks, with headroom of 15 feet over the highway. The bridge will accommodate four railroad tracks.

Natural drainage has been secured by constructing an outlet sewer 1500 feet long.

In the early stages of construction, railroad traffic was carried on the outside tracks of the four existing tracks, while the center section

of the bridge was built within coffer dams. This section is now completed and the railroad traffic is carried on these two permanent tracks on the finished section of the bridge.

The construction is progressing favorably, and will probably permit paving of the subway late in October.

Our expenditures on this project have been \$49,769.13 in the past year.

Grade Separation at Mile 0.7 Belleville Road

An agreement was reached with the Michigan Central Railroad this summer on this project, and construction was immediately started.

This being a trunk line project, approximately three-quarters of our net expenditures are being reimbursed to us by the State.

The railroad tracks being already several feet higher than the highway, were raised only 1 foot, and the highway was depressed through a subway having a 40-foot clear roadway and two 6-foot sidewalks. The clear headroom is 15 feet.

Natural drainage not being possible, the water collecting in the subway is pumped through a sewer to an adjacent county drain.

The superstructure of the bridge provides for two railroad tracks, and the substructure provides for two additional future tracks.

The contract for the substructure, grading, drainage, etc., was let to the R. E. Townsend Corporation, of Ann Arbor, and that for the superstructure to the McClintic-Marshall Company, of Pittsburgh.

The substructure is now nearing completion, and it is probable that the paving may yet be placed this fall.

Our expenditures on this project have been \$41,384.43.

Grade Separation at Mile 5.2 Plymouth Road

Upon signing of an agreement with the Pere Marquette Railroad this spring, plans for this project were completed and contracts have been recently let.

The bridge is being constructed by the railroad. Closser Bros., of Detroit, were awarded the contract for the grading and drainage work.

To care for the very heavy traffic of Plymouth Road, property was leased and a macadam detour constructed adjacent to the crossing. This detour is lighted electrically, and a watchman is kept at its crossing of the railroad 24 hours of the day to direct highway traffic.



Grade separation under the D. & I. Railroad on Division Road south of Michigan Avenue Road. This provides two 28-foot roadways and two 8-foot sidewalks, and when completed will furnish a new north and south thoroughfare from the City of River Rouge to Michigan Avenue Road

The tracks of the railroad have been raised 5 feet, and the highway is being depressed through a subway providing for 40-foot roadway, two 6-foot sidewalks, and 15-foot headroom over the highway. The bridge will carry two railroad tracks, and foundations will be provided for two additional future tracks.

Natural drainage not being possible except at prohibitive expense, a pumping plant, with outlet sewer to a nearby county drain, will be provided.

The work of excavating and grading the subway is now progressing rapidly, but it is unlikely that the entire work will be sufficiently completed in time to permit paving before cold weather halts paving operations.

The expenditure on this project has been \$15,399.31.

Miscellaneous Expenditures on Grade Separations

The cost of maintenance of grade separations during the past year, including the operation of pumping plants, has been \$2,119.87.

In addition, we have expended \$1,505.06 on surveys, plans, and studies of future projects.

We have also made the following miscellaneous expenditures, closing out accounts on other grade separations:

| | |
|--|----------------------|
| Grade Separation at Mile 2.8 Oakwood Blvd..... | \$ 2,487.27 (Credit) |
| Grade Separation at Mile 3.3 Ecorse Road..... | 22,769.74 |
| Grade Separation at Mile 1.5 Ecorse Road..... | 17,839.23 |
| TOTAL..... | \$38,121.70 |

Important Changes in Highway Laws

AT the last session of the legislature, considerable highway legislation was enacted. Most of the discussion centered around the weight tax and the gasoline tax, and while these enactments were very important pieces of legislation, there were many other laws and amendments passed which have a very important bearing upon road operations throughout the State. A summary of these, as contained in the Public Acts of 1925, is as follows:

ACT No. 1 is the weight tax. This provides, with an exemption for common carriers, that all motor vehicles shall be subject to the following tax:

(a) For each motor vehicle, except motorcycles and commercial vehicles, fifty-five cents per hundred pounds of the weight thereof;

(b) For each commercial vehicle according to the following schedule of weights:

| Weights: | Per Hundred Pounds: |
|--|---------------------|
| Up to 2,500 pounds..... | \$0.65 |
| 2,500 to 4,000 pounds..... | .80 |
| 4,000 to 6,000 pounds..... | 1.00 |
| Over 6,000 pounds..... | 1.25 |
| (c) For a trailer weighing up to 1,000 pounds..... | .50 |
| Above 1,000 pounds..... | 1.00 |
| (d) For each motorcycle..... | 4.00 |
| For each motor bicycle..... | 2.50 |

The law also provides the method of computation, collection, etc., and stipulates that the proceeds shall be expended in the following manner:

(a) To pay the interest on and to create a sinking fund to retire State highway bonds as they become due, not less than one million, two hundred thousand dollars;

(b) For maintenance of state trunk line, Federal aid and non-trunk line highways, two million dollars;

(c) For building trunk line bridges, including grade separation, one million dollars;

(d) For non-trunk line highway maintenance and for non-trunk line bridges, five hundred thousand dollars;

(e) For opening, widening, and improving state trunk line and Federal aid highways, all sums in said state highway fund not otherwise appropriated.

Six million dollars, however, of the proceeds are returnable to the counties in amounts proportional to the collection in each county.

ACT No. 2 is the gasoline tax, which provides for a tax of two cents per gallon upon all gasoline consumed in motor vehicles, using a combustible type of engine, upon the roads and highways of the state. The method of collection, etc., is provided for, and it is stipulated that the proceeds shall be expended as follows:

(a) To meet deficiencies in appropriations for the payment of net amounts owing the several counties on state award highways, not less than one million five hundred thousand dollars for the year nineteen hundred twenty-five, and two million dollars each year thereafter until such awards have been paid;

(b) For the payment of interest on the state highway bonds and on the principal thereof, not less than three million dollars;

(c) The balance, if any, shall be used for the general construction, improvement, and betterment of the public highways within the state.

ACT No. 12 provides that the State Highway Commissioner, subject to the approval of the advisory board and the State Administrative Board, is directed to lay out and establish five hundred miles of additional trunk-line highways. Also, that all roads that have been improved as federal aid projects, or may hereafter be so improved, shall be trunk-line highways.

ACT No. 17 provides that after the 1st day of January, 1926, the cost of constructing, improving, and maintaining trunk-line highways shall be met entirely by the State, and that the Counties and Townships shall thereafter be relieved of all expense at present existing. The State Highway Commissioner is authorized to do such work, either by state account or by contract, with the various Boards of County Road Commissioners and Township Boards.

ACT No. 39 provides for the lighting of highways in unincorporated villages and defraying the cost thereof by special assessment.

ACT No. 47 is an amendment to the so-called Covert Act or special assessment act. This amendment provides that in any county operating under the county road system, the Board of Supervisors may direct the Board of County Road Commissioners to construct any part or parts of road, not to exceed four miles in length, on the county road system, for the purpose of closing gaps therein, and such resolution of the Board of Supervisors shall give to the Board of County Road Commissioners the same authority to construct roads as is granted by petition under the provisions of the Covert Act.

ACT No. 52 provides that one-half of that portion of the township highway improvement fund tax, assessed and collected within any incorporated village, shall be annually expended within said village where collected by the Common Council of such village for building, permanently improving, or repairing highways and bridges now in use in such village. Under the previous law, such money could not be expended upon any highway which was not established and laid out before the incorporation of the village.

ACT No. 108 provides for a uniform sign system on trunk-line, county, and township roads. All signs erected under this act are subject to the approval of the State Highway Commissioner. No advertising device may be made a part of any sign or marker, under this act.

ACT No. 114 provides for the construction of grade separations outside of counties and villages having a population of six thousand or more. Under this act, it is necessary for the public authorities having jurisdiction over a street or highway to make application for grade separa-



Showing the new detour ready for travel on the Telegraph Road at Flat Rock. The detour is prepared in advance of separating the grades with the D. T. & I. Railroad at this point.

tions to the Michigan Public Utilities Commission. The Utilities Commission, upon receipt of such application, provides for a hearing thereon. After such hearing, the commission may order the grade separation applied for, in which case the cost thereof shall be borne 50 per cent by the railroad affected and 50 per cent by the public agency having jurisdiction.

ACT No. 143 provides for the repeal of the state reward law, as contained in Act No. 283 of the Public Acts of 1909.

ACT No. 187 is an amendment to the special assessment highway law dealing with the method of assessment.

ACT No. 202 provides that, with the consent of the authorities of any township, the County Road Commissioners of the county in which such township is located, may take over the township highway funds and take charge of the expenditure of same upon the township roads of such township for construction and maintenance.

ACT No. 215 provides that whenever the line of any railroad is upon or adjacent to the right-of-way of a trunk-line highway, the State Highway Commissioner enter into negotiations with such railroad to exchange such designated property for such right-of-way, and to secure such other designated property by condemnation, if necessary.

ACT No. 217 makes it mandatory for the Township Highway Commissioner to expend within any unincorporated village one-half of the highway funds raised within such unincorporated village, in case the electors of the township so determine.

ACT No. 220 provides that in case there are unexpended balances of township funds, raised by the bonds after the projects have been completed for which the bonds were authorized, such unexpended balance may be applied upon the construction and improvement of other township roads, in accordance with the plans and specifications of the State Highway Commissioner.

ACT No. 232 provides that any corporation organized for the purpose of constructing, owning, or operating any highway bridge across any stream forming a part of the boundary between this state and any other state or country, shall have power to condemn any real estate deemed necessary for the purposes of such corporation.

ACT No. 352 is a new condemnation law, enabling the Township Highway Commissioner, the Board of County Road Commissioners, or the State Highway Commissioner to take by power of eminent domain, real estate deemed necessary for:

(a) The right-of-way for any road to be laid out, altered, or widened, or for changing the line thereof;

(b) Securing gravel, rock, sand, dirt, and any other and all other materials that may be needed for the proper construction, improvement, or maintenance of a road;

(c) Providing a clear view for persons and vehicles approaching an intersection of two roads or a highway and railroad;

(d) Changing the channel of any water course, natural or artificial, in order to maintain a proper alignment of any road without crossing such watercourse, and the riparian rights of any person, firm, or corporation in or pertaining to any such watercourse;

(e) Securing land for the storage of materials, road machinery, and equipment;

(f) Securing any and all other property and property rights deemed by the commissioner or commissioners having jurisdiction over a road to be necessary for the proper construction, improvement, or maintenance thereof.

This act provides that in case a public official having jurisdiction, is unable to negotiate for the property, that he may declare it necessary to take the property required, stating therein what he deems to be a fair price for the taking. This declaration is recorded and a notice thereof served upon the owners of the property to be acquired, in which notice it is stated that the public agency is about to take possession of the property described.

When this notice has been properly served, title to the property vests in the public, and possession may be taken at once. Within ninety days, however, the public agency must file a petition, either in the Probate Court or the Circuit Court, asking appointment of three commissioners to appraise the value of the property taken.

These commissioners, when appointed by the Court, are authorized to make the appraisal, in the making of which they may deduct benefits accruing to the property by reason of the proposed improvement.

ACT No. 354 provides for the construction, improvement, and maintenance of bridges, more particularly intermunicipal and interstate bridges, bridges over navigable streams, and bridges over mill races. This act also provides for the alteration of watercourses.

ACT No. 368 provides for the removal of highway encroachments, consisting of telegraph poles, power lines, pipe lines, wires, cables, poles, conduits, sewers and like structures on public highways.

ACT No. 384 is an amendment to the lien law, covering the payment of subcontractors and wages earned and materials used in constructing, repairing, or ornamenting public buildings and public works.

It provides that said contractor must give notice to secure the protection of the act; it provides, also, that the word materials and supplies shall include coal, wood, form lumber, gasoline, kerosene, and lubricating and fuel oils necessarily used in connection with any public work.

Allen Road

| DISTRIBUTION | AMOUNT | TOTALS |
|------------------------------------|-------------|--------------|
| Expenses | | |
| Surveys and Plans..... | \$ 3,400.72 | |
| Right of Way..... | 28,054.77 | |
| Right of Way, Surveys..... | 358.27 | |
| Supervision..... | 3,828.55 | |
| General Stores..... | 947.95 | |
| Coal..... | 1,550.32 | |
| Yards and Sidings..... | 2,467.06 | |
| | <hr/> | \$ 40,607.64 |
| Grade | | |
| Contract..... | \$51,205.13 | |
| Drainage Structures, Labor..... | 256.35 | |
| Drainage Structures, Material..... | 840.99 | |
| Earthwork, Labor..... | 189.80 | |
| Guard Rail, Labor..... | 202.57 | |
| Guard Rail, Material..... | 13.00-Cr. | |
| Shoulders, Labor..... | 51.28 | |
| Shoulders and Grade, Material..... | 52.50 | |
| | <hr/> | \$ 52,785.62 |
| Bridges | | |
| Bridges, Material..... | .46-Cr. | |
| | <hr/> | .46-Cr. |
| Surface | | |
| Sand..... | \$ 2,053.04 | |
| Coarse Aggregate..... | 4,371.21 | |
| Cement..... | 11,580.10 | |
| Expansion Joints..... | 1,614.92 | |
| Reinforcement..... | 554.44 | |
| Fine Grading, Labor..... | 1,301.06 | |
| Mixing and Placing, Labor..... | 2,469.66 | |
| Unloading, Labor..... | 2,189.39 | |
| Hauling, Labor..... | 422.46 | |
| Industrial Track, Labor..... | 1,111.98 | |
| Industrial Track, Material..... | 500.03 | |
| | <hr/> | \$ 28,168.29 |
| Total, Allen Road..... | | \$121,561.09 |

Ann Arbor Road

| DISTRIBUTION | AMOUNT | TOTALS |
|----------------------------|-----------|--------------|
| Expenses | | |
| Surveys and Plans..... | \$ 169.80 | |
| Right of Way..... | 8,177.57 | |
| Right of Way, Surveys..... | 666.28 | |
| Supervision..... | 5,521.09 | |
| General Stores..... | 3,899.77 | |
| Coal..... | 1,803.86 | |
| Yards and Sidings..... | 616.61 | |
| | <hr/> | \$ 20,854.98 |



The type of bridge shown in the upper picture is being replaced by that shown below. (The handrail has not yet been placed on the new bridge.)

Grade

| | | |
|------------------------------------|-------------|--------------|
| Contract..... | \$ 2,497.34 | |
| Drainage Structures, Labor..... | 1,222.70 | |
| Drainage Structures, Material..... | 2,009.08 | |
| Earthwork, Labor..... | 2,878.15 | |
| Shoulders, Labor..... | 3,599.40 | |
| Shoulders and Grade, Material..... | 15.00 | |
| Cutting Brush, Labor..... | 1,508.35 | |
| | | \$ 13,730.02 |

Surface

| | | |
|----------------------------------|-------------|--------------|
| Sand..... | \$12,246.52 | |
| Coarse Aggregate..... | 40,400.93 | |
| Cement..... | 6,185.60 | |
| Expansion Joints..... | 2,707.83 | |
| Reinforcement..... | 4,043.34 | |
| Fine Grading, Labor..... | 4,002.70 | |
| Mixing and Placing, Labor..... | 29,189.53 | |
| Curb and Gutter, Labor..... | 2,017.68 | |
| Unloading, Labor..... | 11,337.51 | |
| Hauling, Labor..... | 5,666.80 | |
| Industrial Track, Labor..... | 5,754.08 | |
| Industrial Track, Materials..... | 511.28 | |
| | | \$124,063.80 |
| Total, Ann Arbor Road..... | | \$158,648.80 |

New Boston-Waltz Road

DISTRIBUTION

AMOUNT

TOTALS

Expenses

| | | |
|----------------------------|----------|-------------|
| Surveys and Plans..... | \$ 1.69 | |
| Right of Way..... | 351.59 | |
| Right of Way, Surveys..... | 108.92 | |
| Supervision..... | 1,508.15 | |
| General Stores..... | 1,087.31 | |
| Coal..... | 338.09 | |
| Yards and Sidings..... | 820.13 | |
| | | \$ 4,215.88 |

Grade

| | | |
|------------------------------------|-------------|--------------|
| Contract..... | \$ 8,269.61 | |
| Drainage Structures, Labor..... | 12.60 | |
| Drainage Structures, Material..... | 753.51 | |
| Earthwork, Labor..... | 1,430.68 | |
| Guard Rail, Material..... | 9.20 | |
| Shoulders, Labor..... | 3,695.76 | |
| Shoulders and Grade, Material..... | 107.80 | |
| | | \$ 14,279.16 |

Surface

| | | |
|-----------------------------------|-------------|--------------|
| Sand..... | \$ 8,458.81 | |
| Coarse Aggregate..... | 20,121.30 | |
| Cement..... | 37,999.96 | |
| Expansion Joints..... | 1,370.42 | |
| Reinforcement..... | 1,637.54 | |
| Fine Grading, Labor..... | 2,225.39 | |
| Mixing and Placing, Labor..... | 14,788.42 | |
| Unloading, Labor..... | 4,639.07 | |
| Hauling, Labor..... | 5,007.47 | |
| Industrial Track, Labor..... | 784.01 | |
| Industrial Track, Material..... | 23.00 | |
| | <hr/> | \$ 97,055.39 |
| Total, New Boston-Waltz Road..... | | \$115,550.43 |

Detroit-Toledo Drive

| DISTRIBUTION | AMOUNT | TOTALS |
|------------------------------------|-------------|--------------|
| Expenses | | |
| Surveys and Plans..... | \$ 1,902.68 | |
| Right of Way..... | 763.75 | |
| Right of Way, Surveys..... | 1,898.91 | |
| Supervision..... | 588.83 | |
| General Stores..... | 251.65 | |
| | <hr/> | \$ 5,405.82 |
| Grade | | |
| Drainage Structures, Labor..... | \$ 457.43 | |
| Drainage Structures, Material..... | 160.11 | |
| Earthwork, Labor..... | 4,076.96 | |
| Cutting, Brush, Labor..... | 386.85 | |
| | <hr/> | \$ 5,081.35 |
| Surface | | |
| Hauling, Labor..... | \$ 43.45 | |
| | <hr/> | \$ 43.45 |
| Total, Detroit-Toledo Drive..... | | \$ 10,530.62 |

Division Road

| DISTRIBUTION | AMOUNT | TOTALS |
|----------------------------|-----------|-------------|
| Expenses | | |
| Surveys and Plans..... | \$ 355.17 | |
| Right of Way, Surveys..... | 89.89 | |
| Supervision..... | 248.96 | |
| General Stores..... | 32.88 | |
| Coal..... | 51.90 | |
| Yards and Sidings..... | 421.21 | |
| | <hr/> | \$ 1,200.01 |

Grade

| | | |
|------------------------------------|-------------|-----------|
| Contract..... | \$10,361.25 | |
| Drainage Structures, Labor..... | 4.20 | |
| Drainage Structures, Material..... | 101.27 | |
| Earthwork, Labor..... | 130.91 | |
| Guard Rail, Labor..... | 25.40 | |
| Shoulders, Labor..... | 30.25 | |
| | <u>\$</u> | 10,653.28 |

Surface

| | | |
|--------------------------------|-----------|----------|
| Sand..... | \$ 476.30 | |
| Coarse Aggregate..... | 1,053.00 | |
| Cement..... | 2,812.32 | |
| Reinforcement..... | 1,161.77 | |
| Fine Grading, Labor..... | 443.71 | |
| Mixing and Placing, Labor..... | 426.87 | |
| Unloading, Labor..... | 426.60 | |
| Hauling, Labor..... | 66.53 | |
| Industrial Track, Labor..... | 211.50 | |
| | <u>\$</u> | 7,078.60 |

Total, Division Road.....\$ 18,931.89

Dix Road Widening

| DISTRIBUTION | AMOUNT | TOTALS |
|---------------------|-----------|--------|
| Expenses | | |
| Right of Way..... | \$ 22.17 | |
| General Stores..... | 616.98 | |
| Coal..... | 185.56 | |
| | <u>\$</u> | 824.71 |

Grade

| | | |
|------------------------------------|-----------|--------|
| Drainage Structures, Material..... | \$ 27.46 | |
| Shoulders, Labor..... | 63.67 | |
| Shoulders and Grade, Material..... | 174.88 | |
| | <u>\$</u> | 266.01 |

Surface

| | | |
|-----------------------|-----------|----------|
| Sand..... | \$ 892.64 | |
| Coarse Aggregate..... | 2,231.52 | |
| Cement..... | 142.71 | |
| | <u>\$</u> | 3,266.87 |

Total, Dix Road Widening.....\$ 4,357.59

Mt. Clemens Drive

| DISTRIBUTION | AMOUNT | TOTALS |
|---------------------------|-----------|----------|
| Expenses | | |
| Surveys and Plans..... | \$ 600.00 | |
| Right of Way..... | 953.91 | |
| Right of Way Surveys..... | 1,215.47 | |
| General Stores..... | 4.21 | |
| | <u>\$</u> | 2,773.59 |

Ecorse Road

| DISTRIBUTION | AMOUNT | TOTALS |
|------------------------------------|-------------------|-------------------|
| Expenses | | |
| Supervision..... | \$ 24.05 | |
| General Stores..... | 3,471.60 | |
| Coal..... | 1,869.91 | |
| Yards and Sidings..... | 1,329.82 | |
| | <u> </u> | |
| | \$ | 6,695.38 |
| Grade | | |
| Drainage Structures, Material..... | \$ 219.51 | |
| Guard Rail, Material..... | 123.19 | |
| Shoulders, Labor..... | 628.81 | |
| | <u> </u> | |
| | \$ | 971.51 |
| Bridges | | |
| Bridges, Labor..... | \$ 643.99 | |
| Bridges, Material..... | 562.18 | |
| | <u> </u> | |
| | \$ | 1,206.17 |
| Surface | | |
| Sand..... | \$ 912.82 | |
| Coarse Aggregate..... | 220.52-Cr. | |
| Cement..... | 3,120.55-Cr. | |
| Expansion Joints..... | 1,031.45 | |
| Mixing and Placing, Labor..... | 2,129.97-Cr. | |
| Unloading, Labor..... | 1,313.39-Cr. | |
| Hauling, Labor..... | 1,770.08-Cr. | |
| Industrial Track, Labor..... | 236.83 | |
| Industrial Track, Material..... | 120.00 | |
| | <u> </u> | |
| | \$ | 6,253.41-Cr. |
| Total, Ecorse Road..... | | <u> </u> |
| | | \$2,619.65 |

Emerson Road

| DISTRIBUTION | AMOUNT | TOTALS |
|----------------------------|-------------------|-----------|
| Expenses | | |
| Surveys and Plans..... | \$ 781.14 | |
| Right of Way..... | 25.34 | |
| Right of Way, Surveys..... | 1,517.03 | |
| Supervision..... | 6,378.53 | |
| General Stores..... | 4,627.75 | |
| Coal..... | 1,590.97 | |
| Yards and Sidings..... | 371.74 | |
| | <u> </u> | |
| | \$ | 15,292.50 |

Grade

| | | |
|------------------------------------|-------------|--------------|
| Contract..... | \$45,096.95 | |
| Drainage Structures, Labor..... | 2,614.52 | |
| Drainage Structures, Material..... | 3,856.03 | |
| Earthwork, Labor..... | 26,965.68 | |
| Shoulders, Labor..... | 5,602.09 | |
| Shoulders and Grade, Material..... | 33.08 | |
| Cutting Brush, Labor..... | 1,114.83 | |
| | | \$ 85,283.18 |

Bridges

| | | |
|------------------------|-------------|-------------|
| Bridges, Labor..... | \$ 4,871.64 | |
| Bridges, Material..... | 2,321.45 | |
| | | \$ 7,193.09 |

Surface

| | | |
|---------------------------------|-------------|--------------|
| Sand..... | \$12,402.13 | |
| Coarse Aggregate..... | 28,722.97 | |
| Cement..... | 68,055.60 | |
| Expansion Joints..... | 2,342.53 | |
| Reinforcement..... | 4,135.13 | |
| Fine Grading, Labor..... | 2,165.18 | |
| Mixing and Placing, Labor..... | 18,075.54 | |
| Unloading, Labor..... | 12,103.50 | |
| Hauling, Labor..... | 7,336.07 | |
| Industrial Track, Labor..... | 5,763.54 | |
| Industrial Track, Material..... | 1,120.55 | |
| | | \$162,222.74 |
| Total, Emerson Road..... | | \$269,991.51 |

Five Mile Road

| DISTRIBUTION | AMOUNT | TOTALS |
|------------------------------------|-----------|-------------|
| Expenses | | |
| Right of Way..... | \$ 21.96 | |
| General Stores..... | 71.17 | |
| Coal..... | 93.56 | |
| Detour Labor..... | 14.50 | |
| | | \$ 201.19 |
| Grade | | |
| Drainage Structures, Material..... | \$ 85.41 | |
| Earthwork, Labor..... | 599.20 | |
| Guard Rail, Material..... | 409.70 | |
| Shoulders, Labor..... | 6.00 | |
| | | \$ 1,100.31 |
| Surface | | |
| Sand..... | \$ 514.23 | |
| Coarse Aggregate..... | 1,068.62 | |
| Cement..... | 1,823.13 | |
| Fine Grading, Labor..... | 36.00 | |
| Mixing and Placing, Labor..... | 1,557.14 | |
| Unloading, Labor..... | 337.51 | |
| Hauling, Labor..... | 151.50 | |
| | | \$ 5,488.13 |
| Total for Five Mile Road..... | | \$ 6,789.63 |

Fort Road

| DISTRIBUTION | AMOUNT | TOTALS |
|------------------------------------|-------------|--------------|
| Expenses | | |
| Surveys and Plans..... | \$ 3,079.44 | |
| Right of Way..... | 8,387.79 | |
| Right of Way, Surveys..... | 167.96 | |
| Supervision..... | 5,649.17 | |
| General Stores..... | 7,236.06 | |
| Coal..... | 3,216.15 | |
| Yards and Sidings..... | 6,500.34 | |
| Detour, Labor..... | 6.00 | |
| | <hr/> | \$ 34,242.91 |
| Grade | | |
| Drainage Structures, Labor..... | \$ 2,208.26 | |
| Drainage Structures, Material..... | 3,550.19 | |
| Earthwork, Labor..... | 62,305.26 | |
| Guard Rail, Material..... | 45.92 | |
| Shoulders, Labor..... | 3,711.94 | |
| Shoulders and Grade, Material..... | 1,029.54 | |
| Cutting Brush, Labor..... | 3,219.83 | |
| | <hr/> | \$ 76,070.94 |
| Bridges | | |
| Bridges, Labor..... | \$13,122.91 | |
| Bridges, Material..... | 11,286.40 | |
| | <hr/> | \$ 24,409.31 |
| Surface | | |
| Sand..... | \$18,805.71 | |
| Coarse Aggregate..... | 49,635.69 | |
| Cement..... | 81,372.79 | |
| Expansion Joints..... | 3,386.74 | |
| Reinforcement..... | 6,433.85 | |
| Fine Grading, Labor..... | 5,250.37 | |
| Mixing and Placing, Labor..... | 16,792.59 | |
| Unloading, Labor..... | 11,274.34 | |
| Hauling, Labor..... | 6,669.03 | |
| Industrial Track, Labor..... | 6,477.89 | |
| Industrial Track, Material..... | 591.55 | |
| | <hr/> | \$206,690.55 |
| Total, Fort Road..... | | \$341,413.71 |

Ford Road

| DISTRIBUTION | AMOUNT | TOTALS |
|----------------------------|-------------|--------------|
| Expenses | | |
| Surveys and Plans..... | \$ 1,042.68 | |
| Right of Way..... | 6.00 | |
| Right of Way, Surveys..... | 870.84 | |
| Supervision..... | 3,711.65 | |
| General Stores..... | 4,841.79 | |
| Coal..... | 2,601.01 | |
| Yards and Sidings..... | 52.41 | |
| | <hr/> | \$ 13,126.38 |

Grade

| | |
|------------------------------------|--------------------|
| Contract..... | \$14,418.12 |
| Drainage Structures, Labor..... | 1,096.98 |
| Drainage Structures, Material..... | 4,941.82 |
| Earthwork, Labor..... | 29,447.37 |
| Guard Rail, Labor..... | 6.00 |
| Guard Rail, Material..... | 34.38 |
| Shoulders, Labor..... | 6,638.72 |
| Shoulders and Grade, Material..... | 427.65 |
| Cutting Brush, Labor..... | 301.98 |
| | <hr/> \$ 57,313.02 |

Bridges

| | |
|------------------------|-------------------|
| Bridges, Labor..... | \$ 1,618.95 |
| Bridges, Material..... | 999.69 |
| | <hr/> \$ 2,618.64 |

Surface

| | |
|---------------------------------|--------------------|
| Sand..... | \$14,279.16 |
| Coarse Aggregate..... | 27,496.87 |
| Cement..... | 69,688.29 |
| Expansion Joints..... | 4,560.05 |
| Reinforcement..... | 3,194.57 |
| Fine Grading, Labor..... | 2,514.04 |
| Mixing and Placing, Labor..... | 16,293.19 |
| Curb and Gutter, Labor..... | 7,369.01 |
| Unloading, Labor..... | 10,852.30 |
| Hauling, Labor..... | 8,067.41 |
| Industrial Track, Labor..... | 5,082.93 |
| Industrial Track, Material..... | 404.40 |
| | <hr/> \$169,802.22 |
| Total, Ford Road..... | \$242,860.26 |

Grand River Road

DISTRIBUTION

AMOUNT TOTALS

Expenses

| | |
|----------------------------|--------------------|
| Surveys and Plans..... | \$ 1,395.30 |
| Right of Way..... | 45,426.07 |
| Right of Way, Surveys..... | 3,058.60 |
| Supervision..... | 924.13 |
| General Stores..... | 2,470.93 |
| Coal..... | 967.91 |
| Yards and Sidings..... | 1,220.17 |
| Detour, Materials..... | 776.16 |
| | <hr/> \$ 56,239.27 |

Grade

| | |
|-------------------------------------|--------------------|
| Contract..... | \$78,692.83 |
| Drainage Structures, Labor..... | 54.00 |
| Drainage Structures, Materials..... | 404.29 |
| Earthwork, Labor..... | 2,300.20 |
| Shoulders, Labor..... | 270.50 |
| Cutting Brush, Labor..... | 5.88 |
| | <hr/> \$ 81,727.70 |

Surface

| | | |
|----------------------------------|-------------|--------------|
| Sand..... | \$ 5,163.18 | |
| Coarse Aggregate..... | 11,121.05 | |
| Cement..... | 3,001.50 | |
| Expansion Joints..... | 1,627.74 | |
| Reinforcement..... | 2,031.40 | |
| Fine Grading, Labor..... | 599.50 | |
| Mixing and Placing, Labor..... | 5,064.22 | |
| Curb and Gutter, Labor..... | 28.00 | |
| Unloading, Labor..... | 3,390.50 | |
| Hauling, Labor..... | 1,899.70 | |
| Industrial Track, Materials..... | 127.00 | |
| | <hr/> | \$ 34,053.79 |
| Total, Grand River Road..... | | \$172,020.76 |

Middle Belt Road

DISTRIBUTION

AMOUNT

TOTALS

Expenses

| | | |
|--------------------------|----------|-------------|
| Surveys and Plans..... | \$ 10.64 | |
| Right of Way..... | 918.81 | |
| Right of Way Survey..... | 83.94 | |
| Supervision..... | 1,406.49 | |
| General Stores..... | 4,957.10 | |
| Coal..... | 344.51 | |
| Yards and Sidings..... | 547.67 | |
| | <hr/> | \$ 8,269.16 |

Grade

| | | |
|------------------------------------|-------------|--------------|
| Contract..... | \$ 4,810.15 | |
| Drainage Structures, Labor..... | 441.90 | |
| Drainage Structures, Material..... | 364.82 | |
| Earthwork, Labor..... | 1,642.70 | |
| Guard Rail, Labor..... | 6.00 | |
| Shoulders, Labor..... | 5,246.62 | |
| Cutting Brush, Labor..... | 366.38 | |
| | <hr/> | \$ 12,878.57 |

Surface

| | | |
|----------------------------------|-------------|--------------|
| Sand..... | \$15,800.62 | |
| Coarse Aggregate..... | 34,399.92 | |
| Cement..... | 92,853.54 | |
| Expansion Joints..... | 3,444.63 | |
| Reinforcement..... | 2,536.50 | |
| Fine Grading, Labor..... | 3,791.57 | |
| Mixing and Placing, Labor..... | 10,882.69 | |
| Unloading, Labor..... | 13,127.42 | |
| Hauling, Labor..... | 2,750.04 | |
| Industrial Track, Labor..... | 6,701.43 | |
| Industrial Track, Materials..... | 908.67 | |
| | <hr/> | \$187,197.03 |
| Total for Middle Belt Road..... | | \$208,344.76 |

Michigan Road

| DISTRIBUTION | AMOUNT | TOTALS |
|------------------------------------|-------------|--------------|
| Expenses | | |
| Surveys and Plans..... | \$ 2,781.83 | |
| Right of Way..... | 413,186.05 | |
| Right of Way, Surveys..... | 9,737.53 | |
| Supervision..... | 9,581.86 | |
| General Stores..... | 3,651.19 | |
| Coal..... | 551.80 | |
| Yards and Sidings..... | 327.24 | |
| Detour, Labor..... | 126.80 | |
| Detour, Materials..... | 575.09 | |
| | <hr/> | \$440,519.39 |
| Grade | | |
| Contract..... | \$25,478.46 | |
| Drainage Structures, Labor..... | 329.60 | |
| Drainage Structures, Material..... | 3,053.97 | |
| Earthwork, Labor..... | 56,197.21 | |
| Guard Rail, Labor..... | 48.55 | |
| Guard Rail, Material..... | 22.83 | |
| Shoulders, Labor..... | 486.95 | |
| Cutting Brush, Labor..... | 414.61 | |
| | <hr/> | \$ 86,032.18 |
| Surface | | |
| Sand..... | \$18,581.74 | |
| Coarse Aggregate..... | 40,370.45 | |
| Cement..... | 27,435.85 | |
| Expansion Joints..... | 2,811.72 | |
| Reinforcement..... | 3,075.28 | |
| Fine Grading, Labor..... | 4,074.21 | |
| Mixing and Placing, Labor..... | 18,316.07 | |
| Curb and Gutter, Labor..... | 14.80 | |
| Unloading, Labor..... | 8,693.27 | |
| Hauling, Labor..... | 4,488.47 | |
| Industrial Track, Labor..... | 4,102.25 | |
| Industrial Track, Material..... | 493.46 | |
| | <hr/> | \$132,457.57 |
| Total, Michigan Avenue Road..... | | \$659,009.14 |

North Line Road

| DISTRIBUTION | AMOUNT | TOTALS |
|------------------------------------|-----------|-----------|
| Expenses | | |
| General Stores..... | \$ 565.18 | |
| Coal..... | 175.85 | |
| | <hr/> | \$ 741.03 |
| Grade | | |
| Drainage Structures, Labor..... | \$ 55.00 | |
| Drainage Structures, Material..... | 499.18 | |
| Earthwork, Labor..... | 410.00 | |
| | <hr/> | \$ 964.18 |

Surface

| | | |
|-----------------------------|-------------------|-------------|
| Sand..... | \$ 2,021.56 | |
| Coarse Aggregate..... | 2,582.31 | |
| Cement..... | 711.24-Cr. | |
| Expansion Joints..... | 535.99 | |
| | <u> </u> | \$ 4,428.62 |
| Total, North Line Road..... | | \$ 6,133.83 |

Northville Road

DISTRIBUTION

AMOUNT

TOTALS

Expenses

| | | |
|------------------------|-------------------|-----------|
| Surveys and Plans..... | \$ 420.85 | |
| Supervision..... | 323.33 | |
| General Stores..... | .04 | |
| | <u> </u> | \$ 744.22 |

Grade

| | | |
|---------------------------------|-------------------|----------|
| Drainage Structures, Labor..... | \$ 6.00 | |
| Guard Rail, Labor..... | 6.00 | |
| | <u> </u> | \$ 12.00 |

Surface

| | | |
|-----------------------------|-------------------|-------------|
| Reinforcement..... | \$ 1,569.91 | |
| | <u> </u> | \$ 1,569.91 |
| Total, Northville Road..... | | \$ 2,326.13 |

Penniman Road

DISTRIBUTION

AMOUNT

TOTALS

Expenses

| | | |
|---------------------|-------------------|---------|
| General Stores..... | \$ 9.44 | |
| | <u> </u> | \$ 9.44 |

Grade

| | | |
|---------------------------------|-------------------|-------------|
| Drainage Structures, Labor..... | \$ 63.00 | |
| Guard Rail, Labor..... | 482.22 | |
| Guard Rail, Material..... | 980.53 | |
| | <u> </u> | \$ 1,525.75 |
| Total, Penniman Road..... | | \$ 1,535.19 |

Plymouth Road

| DISTRIBUTION | AMOUNT | TOTALS |
|-------------------------------------|-------------|--------------|
| Expenses | | |
| Survey and Plans | \$ 143.74 | |
| Right of Way Survey | 729.46 | |
| Supervision | 1,307.20 | |
| General Stores | 3,724.10 | |
| Coal | 430.67 | |
| Yards and Sidings | 473.04 | |
| | \$ | 6,808.21 |
| Grade | | |
| Earthwork, Labor | \$ 446.50 | |
| Drainage Structures, Labor | 586.74 | |
| Drainage Structures, Material | 1,330.81 | |
| Guard Rail, Labor | 1,719.15 | |
| Guard Rail, Material | 1,897.00 | |
| Shoulders, Labor | 6,284.99 | |
| Shoulders and Grade Material | 564.16 | |
| Cutting Brush, Labor | 869.89 | |
| | \$ | 13,699.24 |
| Surface | | |
| Sand | \$ 4,206.40 | |
| Coarse Aggregate | 8,986.97 | |
| Cement | 18,848.93 | |
| Expansion Joints | 2,942.44 | |
| Reinforcement | 1,086.47 | |
| Fine Grading, Labor | 2,379.97 | |
| Mixing and Placing, Labor | 4,248.76 | |
| Curb and Gutter, Labor | 36.00 | |
| Unloading, Labor | 5,308.78 | |
| Hauling, Labor | 1,939.52 | |
| Industrial Track, Labor | 1,545.15 | |
| Industrial Track, Materials | 98.20 | |
| | \$ | 51,627.59 |
| Total for Plymouth Road | | \$ 72,135.04 |

River Road Widening

| DISTRIBUTION | AMOUNT | TOTALS |
|---------------------------|------------|-----------|
| Expenses | | |
| Surveys and Plans | \$ 584.29 | |
| Right of Way | 9,064.83 | |
| Right of Way Survey | 373.86 | |
| Supervision | 202.67 | |
| General Stores | 1,254.41 | |
| Coal | 308.64 | |
| Yards and Sidings | 105.51-Cr. | |
| | \$ | 11,683.19 |

Grade

| | | |
|------------------------------------|-----------|-----------|
| Drainage Structures, Labor..... | \$ 4.95 | |
| Drainage Structures, Material..... | 15.87 | |
| Earthwork, Labor..... | 4,685.52 | |
| Guard Rail, Labor..... | 12.00 | |
| Guard Rail, Material..... | 57.29 | |
| Shoulders, Labor..... | 5,979.08 | |
| Shoulders and Grade Material..... | 2,889.31 | |
| | <u>\$</u> | 13,644.02 |

Bridges

| | | |
|------------------------|---------------|------------|
| Bridges, Material..... | \$ 181.22-Cr. | |
| | <u>\$</u> | 181.22-Cr. |

Surface

| | | |
|--------------------------------|-------------|-----------|
| Sand..... | \$ 8,484.03 | |
| Coarse Aggregate..... | 13,905.71 | |
| Cement..... | 19,841.18 | |
| Expansion Joints..... | 1,046.08 | |
| Mixing and Placing, Labor..... | 2,174.56 | |
| Curb and Gutter, Labor..... | 662.70 | |
| Unloading, Labor..... | 1,233.92 | |
| Hauling, Labor..... | 133.80 | |
| | <u>\$</u> | 47,481.98 |

Total for River Road Widening..... \$ 72,627.97

Seven Mile Road East Widening**DISTRIBUTION****AMOUNT****TOTALS****Expenses**

| | | |
|---------------------|-----------|--------|
| Right of Way..... | \$ 6.19 | |
| Supervision..... | 12.03 | |
| General Stores..... | 684.22 | |
| Coal..... | 22.51 | |
| | <u>\$</u> | 724.95 |

Grade

| | | |
|------------------------------------|-----------|--------|
| Drainage Structures, Material..... | \$ 178.56 | |
| Shoulders, Labor..... | 5.60 | |
| Shoulders and Grade Material..... | 67.48 | |
| | <u>\$</u> | 251.64 |

Surface

| | | |
|-----------------------|-----------|----------|
| Sand..... | \$ 374.20 | |
| Coarse Aggregate..... | 2,217.11 | |
| Cement..... | 2,189.08 | |
| | <u>\$</u> | 4,780.39 |

Total, Seven Mile Road East Widening..... \$ 5,756.98

Seven Mile Road West Widening

| DISTRIBUTION | AMOUNT | TOTALS |
|--|-------------|--------------|
| Expenses | | |
| Surveys and Plans..... | \$ 880.63 | |
| Right of Way..... | 35.10 | |
| Right of Way Surveys..... | 419.01 | |
| Supervision..... | 1,569.68 | |
| General Stores..... | 1,587.08 | |
| Coal..... | 527.78 | |
| | <u>\$</u> | 5,019.28 |
| Grade | | |
| Drainage Structures, Labor..... | \$ 5,668.39 | |
| Drainage Structures, Material..... | 6,256.25 | |
| Earthwork, Labor..... | 14,473.49 | |
| Guard Rail, Labor..... | 19.00 | |
| Shoulders, Labor..... | 1,965.32 | |
| Shoulders and Grade Material..... | 121.10 | |
| Cutting Brush, Labor..... | 201.83 | |
| | <u>\$</u> | 28,705.38 |
| Bridges | | |
| Bridges, Material..... | \$ 27.54 | |
| | <u>\$</u> | 27.54 |
| Surface | | |
| Sand..... | \$ 9,879.28 | |
| Coarse Aggregate..... | 22,006.24 | |
| Cement..... | 36,743.91 | |
| Expansion Joints..... | 2,581.68 | |
| Fine Grading, Labor..... | 849.00 | |
| Mixing and Placing Labor..... | 9,566.26 | |
| Curb and Gutter, Labor..... | 63.00 | |
| Unloading, Labor..... | 1,280.06 | |
| Hauling, Labor..... | 4,813.28 | |
| | <u>\$</u> | 87,782.71 |
| Total for Seven Mile Road West Widening..... | | \$121,534.91 |

Six Mile Road

| DISTRIBUTION | AMOUNT | TOTALS |
|---------------------------|-----------|----------|
| Expenses | | |
| Surveys and Plans..... | \$ 744.57 | |
| Right of Way..... | 23.68 | |
| Right of Way Surveys..... | 4.50 | |
| Supervision..... | 2,530.41 | |
| General Stores..... | 2,374.91 | |
| Coal..... | 920.15 | |
| Yards and Sidings..... | 1,523.11 | |
| | <u>\$</u> | 8,121.33 |

Grade

| | | |
|------------------------------------|-------------|--------------|
| Contract..... | \$29,996.07 | |
| Drainage Structures, Labor..... | 1,296.55 | |
| Drainage Structures, Material..... | 1,390.41 | |
| Earthwork, Labor..... | 1,435.58 | |
| Shoulders, Labor..... | 4,125.67 | |
| Shoulders and Grade, Material..... | 1,754.22 | |
| Cutting Brush, Labor..... | 7.20 | |
| | | \$ 40,005.70 |

Bridges

| | | |
|------------------------|-------------|-------------|
| Bridges, Labor..... | \$ 2,503.72 | |
| Bridges, Material..... | 1,777.75 | |
| | | \$ 4,281.47 |

Surface

| | | |
|----------------------------------|-------------|--------------|
| Sand..... | \$ 7,832.67 | |
| Coarse Aggregate..... | 14,914.59 | |
| Cement..... | 41,638.55 | |
| Expansion Joints..... | 2,542.08 | |
| Reinforcement..... | 1,309.51 | |
| Fine Grading, Labor..... | 1,197.68 | |
| Mixing and Placing, Labor..... | 10,044.86 | |
| Unloading, Labor..... | 6,337.22 | |
| Hauling, Labor..... | 3,076.75 | |
| Industrial Track, Labor..... | 4,982.76 | |
| Industrial Track, Materials..... | 543.12 | |
| | | \$ 94,419.79 |
| Total, Six Mile Road..... | | \$146,828.29 |

South Dearborn Road**DISTRIBUTION****AMOUNT TOTALS****Expenses**

| | | |
|---------------------------|-----------|-------------|
| Surveys and Plans..... | \$ 511.20 | |
| Right of Way..... | 40.96 | |
| Right of Way Surveys..... | 122.77 | |
| Supervision..... | 995.55 | |
| General Stores..... | 95.56 | |
| Coal..... | 103.79 | |
| Yards and Sidings..... | 894.60 | |
| | | \$ 2,764.43 |

Grade

| | | |
|------------------------------------|-------------|--------------|
| Contract..... | \$19,510.66 | |
| Drainage Structures, Labor..... | 1,241.77 | |
| Drainage Structures, Material..... | 728.24 | |
| Earthwork, Labor..... | 2,412.52 | |
| Shoulders, Labor..... | 51.28 | |
| | | \$ 23,944.47 |

Surface

| | | | |
|---------------------------------|----|-----------|--|
| Reinforcement..... | \$ | 330.08 | |
| Fine Grading, Labor..... | | 148.55 | |
| Mixing and Placing, Labor..... | | 535.74 | |
| Hauling, Labor..... | | 204.50 | |
| Industrial Track, Labor..... | | 871.88 | |
| | | <hr/> | |
| | \$ | 2,090.75 | |
| Total, South Dearborn Road..... | \$ | 28,799.65 | |

Elizabeth Park Entrance

| DISTRIBUTION | | AMOUNT | TOTALS |
|-------------------------------------|----|----------|--------|
| Expenses | | | |
| General Stores..... | \$ | 5.68 | |
| Coal..... | | 16.05 | |
| | | <hr/> | |
| | | | 21.73 |
| Grade | | | |
| Drainage Structures, Material..... | \$ | 4.59 | |
| Earthwork, Labor..... | | 151.45 | |
| | | <hr/> | |
| | | | 156.04 |
| Surface | | | |
| Sand..... | \$ | 39.43 | |
| Mixing and Placing, Labor..... | | 593.78 | |
| Curb and Gutter, Labor..... | | 284.16 | |
| Hauling, Labor..... | | 42.00 | |
| | | <hr/> | |
| | \$ | 959.37 | |
| Total, Elizabeth Park Entrance..... | \$ | 1,137.14 | |

Telegraph Road

| DISTRIBUTION | | AMOUNT | TOTALS |
|------------------------------------|----|-----------|----------|
| Expenses | | | |
| Surveys and Plans..... | \$ | 558.16 | |
| Right of Way..... | | 585.25 | |
| Right of Way, Surveys..... | | 579.35 | |
| Supervision..... | | 1,439.76 | |
| General Stores..... | | 3,025.24 | |
| Coal..... | | 1,520.66 | |
| Yards and Sidings..... | | 54.66 | |
| | | <hr/> | |
| | | | 7,763.08 |
| Grade | | | |
| Contract..... | \$ | 618.00 | |
| Drainage Structures, Labor..... | | 220.89 | |
| Drainage Structures, Material..... | | 1,512.60 | |
| Earthwork, Labor..... | | 367.12 | |
| Guard Rail, Labor..... | | 2,088.86 | |
| Guard Rail, Material..... | | 3,353.10 | |
| Shoulders, Labor..... | | 16,693.31 | |
| Shoulders and Grade Material..... | | 346.42 | |
| Cutting Brush, Labor..... | | 6.00 | |
| | | <hr/> | |
| | \$ | 25,206.30 | |

Bridges

| | | |
|------------------------|-------------------|-------------|
| Bridges, Labor..... | \$ 2,026.39 | |
| Bridges, Material..... | 1,129.55 | |
| | <u> </u> | \$ 3,155.94 |

Surface

| | | |
|----------------------------------|-------------------|--------------|
| Sand..... | | |
| Coarse Aggregate..... | \$12,707.94 | |
| Cement..... | 1,103.32 | |
| Expansion Joints..... | 1,350.20 | |
| Reinforcement..... | 12.20-Cr. | |
| Mixing and Placing, Labor..... | 130.47 | |
| Unloading, Labor..... | 4,744.99 | |
| Hauling, Labor..... | 73.15 | |
| Industrial Track, Labor..... | 621.96 | |
| Industrial Track, Materials..... | 33.00 | |
| | <u> </u> | \$ 20,752.83 |
| Total, Telegraph Road..... | | \$ 56,878.15 |

Tireman Road

DISTRIBUTION

AMOUNT TOTALS

Expenses

| | | |
|------------------------|-------------------|-------------|
| Surveys and Plans..... | \$ 37.00 | |
| Right of Way..... | 921.35 | |
| Supervision..... | 1,345.71 | |
| General Stores..... | 2,290.34 | |
| Coal..... | 265.67 | |
| Yards and Sidings..... | 18.00 | |
| Detour Labor..... | 296.10 | |
| Detour Materials..... | 161.39 | |
| | <u> </u> | \$ 5,335.56 |

Grade

| | | |
|------------------------------------|-------------------|--------------|
| Contract..... | \$10,016.84 | |
| Drainage Structures, Labor..... | 628.71 | |
| Drainage Structures, Material..... | 1,569.91 | |
| Earthwork, Labor..... | 5,710.67 | |
| Shoulders, Labor..... | 30.25 | |
| Shoulders and Grade, Material..... | 246.00 | |
| | <u> </u> | \$ 18,202.38 |

Bridges

| | | |
|------------------------|-------------------|-----------|
| Bridges, Labor..... | \$ 739.02 | |
| Bridges, Material..... | 58.79 | |
| | <u> </u> | \$ 797.81 |

Surface

| | | |
|----------------------------------|---------------------|--------------|
| Sand..... | \$ 7,948.03 | |
| Coarse Aggregate..... | 13,584.77 | |
| Cement..... | 37,436.90 | |
| Expansion Joints..... | 2,592.90 | |
| Reinforcement..... | 1,596.03 | |
| Fine Grading, Labor..... | 3,693.53 | |
| Mixing and Placing, Labor..... | 7,136.55 | |
| Curb and Gutter, Labor..... | 9,049.84 | |
| Unloading, Labor..... | 6,230.65 | |
| Hauling, Labor..... | 2,881.84 | |
| Industrial Track, Labor..... | 3,635.71 | |
| Industrial Track, Materials..... | 145.65 | |
| | <u>\$ 95,932.40</u> | |
| Total, Tireman Road..... | | \$120,268.15 |

Van Dyke Road**DISTRIBUTION****AMOUNT****TOTALS****Expenses**

| | | |
|------------------------|--------------------|--|
| Surveys and Plans..... | \$ 23.08 | |
| Supervision..... | 1,452.41 | |
| General Stores..... | 686.04 | |
| Coal..... | 139.15 | |
| Detour Materials..... | 6.00 | |
| | <u>\$ 2,306.68</u> | |

Grade

| | | |
|------------------------------------|---------------------|--|
| Contract..... | \$26,847.80 | |
| Drainage Structures, Labor..... | 139.31 | |
| Drainage Structures, Material..... | 672.27 | |
| Earthwork, Labor..... | 575.66 | |
| Guard Rail, Labor..... | 12.00 | |
| Shoulders, Labor..... | 1,162.80 | |
| Shoulders and Grade Material..... | 28.78 | |
| Cutting Brush, Labor..... | 139.38 | |
| | <u>\$ 29,578.00</u> | |

Surface

| | | |
|--------------------------------|---------------------|--------------|
| Sand..... | \$ 5,462.78 | |
| Coarse Aggregate..... | 12,472.30 | |
| Cement..... | 3,577.23 | |
| Expansion Joints..... | 371.93 | |
| Reinforcement..... | 499.33 | |
| Fine Grading, Labor..... | 1,221.79 | |
| Mixing and Placing, Labor..... | 2,291.84 | |
| Curb and Gutter, Labor..... | 37.84 | |
| Unloading, Labor..... | 883.73 | |
| Hauling, Labor..... | 1,049.62 | |
| | <u>\$ 27,868.39</u> | |
| Total for Van Dyke Road..... | | \$ 59,753.07 |

Warren Road Widening

| DISTRIBUTION | AMOUNT | TOTALS |
|--------------------------------------|--------------|--------------|
| Expenses | | |
| Surveys and Plans | \$ 384.18 | |
| Right of Way | 18.95 | |
| Supervision | 1,567.88 | |
| General Stores | 1,099.76 | |
| Coal | 149.80 | |
| Yards and Sidings | 193.38 | |
| | \$ 3,413.95 | |
| Grade | | |
| Contract | \$21,062.61 | |
| Drainage Structures, Labor | 7,712.48 | |
| Drainage Structures, Material | 11,636.82 | |
| Earthwork, Labor | 4,524.58 | |
| Guard Rail, Labor | 18.00 | |
| Shoulders, Labor | 1,601.42 | |
| | \$ 46,555.91 | |
| Bridges | | |
| Bridges, Labor | \$ 246.34 | |
| Bridges, Material | 303.30 | |
| | \$ 549.64 | |
| Surface | | |
| Sand | \$ 5,533.65 | |
| Coarse Aggregate | 10,266.64 | |
| Cement | 19,588.85 | |
| Expansion Joints | 1,273.25 | |
| Fine Grading, Labor | 1,977.90 | |
| Mixing and Placing, Labor | 9,744.53 | |
| Curb and Gutter, Labor | 12.00 | |
| Unloading, Labor | 6,877.17 | |
| Hauling, Labor | 2,050.11 | |
| | \$ 57,324.10 | |
| Total for Warren Road Widening | | \$107,843.60 |

Administration and General Expenses

September 16, 1924 to August 31, 1925

| DISTRIBUTION | AMOUNT | TOTALS |
|--|-------------|--------------|
| Commissioners' Salaries..... | \$ 5,540.00 | |
| Office Salaries..... | 42,329.14 | |
| Office Expenses..... | 3,425.61 | |
| Engineers Salaries..... | 37,725.26 | |
| Engineering Expenses..... | 9,976.65 | |
| Printing and Stationery..... | 3,348.33 | |
| Publishing Annual Report..... | 3,468.86 | |
| Postage..... | 1,403.76 | |
| Telephone and Telegraph..... | 4,714.89 | |
| Audits and Investigations..... | 2,652.00 | |
| Traveling Expense..... | 457.01 | |
| Signboarding..... | 881.52 | |
| Fire Insurance..... | 1,752.09 | |
| Liability and Compensation Insurance..... | 17,553.67 | |
| Repairs to Buildings..... | 2,422.14 | |
| Depreciation Expense..... | 176,242.81 | |
| Maintenance and Operation of Telegraph North Comfort Station | 96.12 | |
| Repairs to Tools and Equipment—Wayne..... | 70,405.50 | |
| Shop Expense—Wayne..... | 28,891.02 | |
| Storekeeping Expense—Wayne..... | 9,512.10 | |
| Yard Expense—Wayne..... | 16,941.37 | |
| Miscellaneous Inbound Freight—Wayne..... | 4,877.74 | |
| Repairs to Tools and Equipment—Wyoming..... | 12,493.28 | |
| Shop Expense—Wyoming..... | 15,990.45 | |
| Storekeeping Expense—Wyoming..... | 4,744.32 | |
| Yard Expense—Wyoming..... | 9,169.83 | |
| Miscellaneous Inbound Freight—Wyoming..... | 58.86 | |
| Operating and Maintenance—Automobiles..... | 38,626.80 | |
| Operating and Maintenance—Trucks..... | 90,573.82 | |
| Operating and Maintenance—Motorcycles..... | 60.59 | |
| Operating and Maintenance—Gas Clams and Cranes..... | 12,275.03 | |
| Operating and Maintenance—Road Rollers..... | 436.90 | |
| Operating and Maintenance—Steam Shovels..... | 6,153.71 | |
| Operating and Maintenance—Pavers..... | 21,409.61 | |
| Operating and Maintenance—Steam Locomotives..... | 3,957.62 | |
| Operating and Maintenance—Gas Locomotives..... | 3,753.32 | |
| Operating and Maintenance—Tractors..... | 9,356.60 | |
| Total Administration and General Expense..... | | \$673,678.33 |

Trial Balance August 31, 1925 On Basis of Books Being Closed December 31, 1924

| ASSETS | DEBITS | CREDITS | INCREASE OVER 1924 | DECREASE OVER 1924 |
|---|---------------|----------|-----------------------|-----------------------|
| Cash—Road Fund..... | \$ 662,880.92 | ..... | \$ 2,972.39 | ..... |
| Cash—Dix Bridge Fund..... | 914,404.45 | ..... | \$ 914,404.45 | ..... |
| Accounts Receivable..... | 1,398,384.27 | ..... | 383,808.08 | ..... |
| General Stores—Wayne..... | 78,944.96 | ..... | ..... | \$ 46,443.05 |
| Cement—Wayne..... | 6,224.14 | ..... | ..... | 11,528.25 |
| Cement Sacks—Wayne..... | 24,462.10 | ..... | ..... | 35,407.50 |
| Cement Sacks—Michigan State Industries..... | 709.40 | ..... | 709.40 | ..... |
| Pebbles—Wayne..... | 760.85 | ..... | ..... | 6,567.41 |
| Sand—Wayne..... | ..... | \$ 38.92 | ..... | 3,679.11 |
| Limestone—Wayne..... | 1,084.09 | ..... | ..... | 1,344.76 |
| Granite—Wayne..... | 977.39 | ..... | 73.38 | ..... |
| Crock—Wayne..... | 2,936.94 | ..... | ..... | 1,397.38 |
| Brick—Wayne..... | 252.77 | ..... | ..... | 261.19 |
| Expansion Joints—Wayne..... | 7,468.85 | ..... | ..... | 12,392.24 |
| Tarvia..... | 482.24 | ..... | ..... | 654.22 |
| Coal—Wayne..... | 772.77 | ..... | ..... | 10,199.19 |
| Lumber—Wayne..... | 5,971.01 | ..... | 659.74 | 4,178.71 |
| Piling—Wayne..... | 659.74 | ..... | ..... | ..... |
| General Stores—Wyoming..... | 3,210.33 | ..... | 1,394.17 | 48,337.42 |
| Cement—Wyoming..... | 12,764.63 | ..... | ..... | 4,202.15 |
| Pebbles—Wyoming..... | 1,151.05 | ..... | ..... | 2,649.24 |
| Sand—Wyoming..... | ..... | 56.94 | ..... | 714.10 |
| Limestone—Wyoming..... | 777.72 | ..... | ..... | 3,571.14 |
| Granite—Wyoming..... | ..... | 45.70 | ..... | 861.87 |
| Crock—Wyoming..... | 838.50 | ..... | 1,295.98 | ..... |
| Brick—Wyoming..... | 1,683.48 | ..... | 310.45 | ..... |
| Expansion Joints—Wyoming..... | 310.45 | 260.58 | ..... | 2,219.60 |
| Tarvia—Wyoming..... | 763.26 | ..... | ..... | 7,837.54 |
| Dust Layers—Wyoming..... | 1,506.78 | ..... | 392.49 | ..... |
| Coal—Wyoming..... | 1,584.87 | ..... | ..... | 3,219.61 |
| Lumber—Wyoming..... | 4,711,695.13 | ..... | ..... | 1,750,467.13 |
| Construction Cost..... | 26,141.07 | ..... | ..... | 2,109.30 |
| Production Orders in Progress..... | ..... | ..... | ..... | ..... |

| LIABILITIES | DEBITS | CREDITS | INCREASE OVER 1924 | DECREASE OVER 1924 |
|-------------------------------------|--------|--------------|-----------------------|-----------------------|
| Unclaimed Wage Checks..... | | \$ 1,351.00 | \$ 117.96 | |
| Reserve for Depreciation: | | | | |
| Road Improvements..... | | 3,105,421.00 | 942,389.48 | |
| Buildings..... | | 15,879.03 | 4,070.03 | |
| Machinery..... | | 166,089.35 | 50,999.73 | |
| Industrial Railway Equipment..... | | 106,086.98 | 43,611.46 | |
| Railroad Sidings..... | | 3,330.44 | 959.07 | |
| Camp Equipment..... | | 527.51 | 468.32 | |
| Wagons..... | | 570.10 | | \$15,541.37 |
| Grading Equipment..... | | 7,737.24 | 1,886.67 | |
| Autos and Trucks..... | | 38,022.29 | 3,458.36 | |
| Engineers Equipment..... | | 3,925.93 | 1,069.44 | |
| Office Furniture and Equipment..... | | 5,379.71 | 855.87 | |
| Shop Equipment—Wayne..... | | 26,436.67 | 9,528.28 | |
| Shop Equipment—Wyoming..... | | | | 3,308.01 |
| Pipe and Fittings..... | | 23,199.09 | 7,325.60 | |
| Prepaid Insurance..... | | | | \$ 18,849.38 |
| | | | | \$1,066,740.27 |

| | | | | |
|---|-----------------|-----------------|----------------|-------|
| Capital Surplus..... | Capital | \$20,230,008.60 | \$5,424,627.28 | ..... |
| Income | | | | |
| Good Road Taxes..... | | \$2,515,797.48 | ..... | ..... |
| Auto Taxes..... | | 1,264,353.82 | ..... | ..... |
| Interest on delinquent taxes..... | | 8,256.88 | ..... | ..... |
| State Rewards—Maintenance..... | | 54,596.20 | ..... | ..... |
| Other Rewards..... | | 172,649.50 | ..... | ..... |
| House Rental..... | | 150.00 | ..... | ..... |
| Profit and Loss on Miscellaneous Sales..... | | 246.61 | ..... | ..... |
| Profit and Loss on Equipment..... | | 617.03 | ..... | ..... |
| Previous Years Operations..... | \$ | 30,081.93 | ..... | ..... |
| Comm. Salaries paid from General Fund..... | | 4,040.00 | ..... | ..... |
| Contractual Income..... | | 481,807.35 | ..... | ..... |
| Track Rental—Jefferson Bridge..... | | 10,000.00 | ..... | ..... |
| Track Rental—Fort Bridge..... | | 10,000.00 | ..... | ..... |
| Equipment Rental..... | | 2,714.35 | ..... | ..... |
| Appropriation for Sign Boarding..... | | 10,000.00 | ..... | ..... |
| Expenses | | | | |
| Road Maintenance..... | \$238,045.06 | ..... | ..... | ..... |
| Administration and General Expense..... | 287,519.40 | ..... | ..... | ..... |
| Fire Loss on Wyoming Garage | | | | |
| Fire Loss..... | \$ | 34,466.80 | ..... | ..... |
| Increase on Assets..... | \$28,269,596.30 | \$28,269,596.30 | ..... | ..... |
| Decrease on Assets..... | 7,937,923.18 | 7,937,923.18 | ..... | ..... |
| | 2,042,846.21 | 2,042,846.21 | ..... | ..... |
| Increase on Liabilities..... | 1,066,740.27 | 1,066,740.27 | ..... | ..... |
| Decrease on Liabilities..... | 18,849.38 | 18,849.38 | ..... | ..... |
| Increase in Capital Surplus..... | | | \$5,895,076.97 | ..... |
| | | | \$1,047,890.89 | ..... |
| | | | \$5,424,627.28 | ..... |

Road Maintenance September 16, 1924 to August 31, 1925

| ROAD | SNOW REMOVAL | GRADE | FORESTRY AND ROADSIDE | | BRIDGES | SURFACE | MAINTENANCE OF LIGHTS MISCELLANEOUS AND SIGNALS EXPENSE | | TOTALS |
|---------------------------------|-----------------|-------------|--------------------------|-----------|---------|-----------|---|----------|-------------|
| | | | \$ | \$ | | | \$ | \$ | |
| Allen..... | 14.50 | \$ 3,091.35 | \$ 173.41 | | | \$ 118.86 | \$ 156.15 | \$ 10.66 | \$ 3,564.93 |
| Ann Arbor..... | 5.40 | 19.00 | 947.01 | | | | | | 971.41 |
| Beck..... | 6.00 | 64.75 | 81.33 | | | 669.28 | | 3.28 | 824.64 |
| Canton Center..... | 66.67 | 4,511.44 | 3,884.21 | \$ 200.40 | | 1,893.17 | 62.99 | 57.29 | 10,676.17 |
| Division..... | 72.62 | 4,971.48 | 788.60 | | | 2,232.74 | 256.89 | 86.04 | 8,408.37 |
| Dix..... | 7.80 | 578.98 | | | | 1,295.08 | | 151.50 | 2,033.36 |
| Ecorse..... | 766.53 | 6,416.28 | 420.74 | | | 2,018.75 | 536.71 | 72.82 | 10,231.83 |
| Eight Mile..... | 5.40 | 393.39 | | | | 2,619.93 | | 19.91 | 3,038.63 |
| Emerson..... | | 163.20 | 9.60 | | | 81.50 | | | 254.30 |
| Eureka..... | 593.71 | 4,108.70 | 3,850.44 | | | 3,213.81 | 312.89 | 171.31 | 12,250.86 |
| Farmington and Wayne North..... | 56.25 | 3,535.55 | 10,781.98 | | | 394.44 | 343.34 | 13.68 | 15,125.24 |
| Fishery..... | 45.31 | 1,985.32 | 574.69 | | | 421.90 | | 7.38 | 3,034.60 |
| Five Mile..... | 47.80 | 10,065.15 | 9,054.22 | | | 2,970.58 | 194.14 | 381.84 | 22,713.73 |
| Ford and Cherry Hill..... | 59.25 | 2,407.02 | 2,467.13 | | | 1,176.60 | 170.85 | 31.29 | 6,312.14 |
| Ford Republic..... | | | | | | 138.83 | | | 138.83 |
| Fort..... | 126.68 | 4,255.00 | 1.14 | | | 9,244.45 | 164.32 | 52.02 | 13,843.61 |
| Grand River..... | 595.23 | 5,049.93 | 51.41 | | | 10,853.85 | 95.60 | 201.08 | 16,847.10 |
| Gratiot..... | 355.17 | 4,418.77 | 98.97 | | | 2,316.60 | 21.40 | 63.50 | 7,274.41 |
| Grosse Ile..... | 8.03 | 566.84 | 748.34 | | 43.87 | 99.42 | | 81.91 | 1,548.41 |
| Huron River Drive..... | 403.26 | 9,832.10 | 6,947.77 | | 288.55 | 3,366.77 | 151.88 | 32.73 | 21,023.06 |
| Jefferson..... | 5.40 | 559.48 | 1,997.63 | | | 1,357.77 | | 55.76 | 3,976.04 |
| Lahser..... | 11.40 | 555.08 | 514.90 | | | 124.68 | 18.00 | 12.62 | 1,236.68 |
| Livernois..... | | 1,737.59 | | | | 1,996.27 | 12.39 | 46.92 | 3,793.17 |
| Mack..... | 274.74 | 2,179.14 | 72.94 | | | 1,984.72 | 54.09 | 16.58 | 4,582.21 |
| Michigan..... | 588.75 | 12,431.77 | 2,792.64 | | | 8,431.46 | 400.75 | 633.88 | 25,279.25 |
| Middle Belt..... | 173.63 | 7,841.36 | 5,846.14 | | | 807.23 | 240.31 | 146.79 | 15,055.46 |
| Miller..... | 68.50 | 3,734.13 | | | | 9,031.80 | 21.40 | 155.12 | 13,010.95 |
| Mt. Elliott..... | 13.46 | 2,693.54 | | | | 1,725.47 | | 18.70 | 4,451.17 |
| North Line..... | 17.55 | 86.61 | | | | 76.75 | | | 180.91 |
| Northville..... | 42.70 | 1,255.47 | 249.17 | | | 7,322.46 | 77.13 | 50.30 | 8,997.23 |
| Oakwood..... | 361.30 | 3,598.24 | 81.52 | | | 1,365.57 | 156.16 | 49.01 | 5,611.80 |
| North Territorial..... | 6.00 | 501.00 | 12.00 | | | 5,071.08 | | 64.75 | 5,654.83 |

| EXPENSES INCLUDE: | GRADE INCLUDES: | | | SURFACE INCLUDES: | | |
|-----------------------------|--|--------------|-------------|---|------------|--------------|
| Small tools, hardware, etc. | Macadam Shoulders, Guard Rail, Cutting Weeds, Ornamental Road Signs. | | | Tarring Cracks and Holes, Concrete patches, Bituminous Repairs. | | |
| Phoenix..... | 36.30 | 2,844.34 | 2,578.78 | 1,003.08 | ..... | 22.97 |
| Plymouth..... | 109.45 | 7,384.15 | 1,368.36 | 9,807.72 | 817.56 | 228.48 |
| Ridge..... | 2.90 | 29.22 | ..... | 141.33 | ..... | 173.45 |
| River..... | 223.78 | 5,397.20 | 979.04 | 3,080.23 | 127.67 | 135.80 |
| Schoenherr..... | ..... | 229.73 | ..... | 40.77 | 129.22 | ..... |
| Seven Mile East..... | 206.77 | 9,126.24 | 3,249.61 | 5,906.49 | 284.56 | 168.52 |
| Seven Mile West..... | 214.90 | 12,799.27 | 4,614.78 | 15,795.18 | 182.21 | 400.62 |
| Six Mile..... | ..... | 512.73 | 82.20 | ..... | ..... | 16.89 |
| Southfield..... | ..... | 563.36 | 320.00 | 317.52 | ..... | ..... |
| Sumpter and Willis..... | 125.00 | 2,202.28 | 333.87 | 609.94 | 85.90 | 25.73 |
| Telegraph North..... | 59.90 | 4,029.46 | 3,718.46 | 271.79 | 53.23 | Cr. 34 |
| Telegraph South..... | 630.87 | 9,402.08 | 7,103.75 | 1,670.45 | 565.44 | 202.41 |
| Van Dyke..... | 80.16 | 693.31 | 101.21 | 235.19 | 24.70 | Cr. 3.82 |
| Vernier..... | 24.26 | 434.93 | 1,428.44 | 57.84 | 39.16 | 62.47 |
| Waltz and Willow..... | 58.83 | 2,129.95 | 357.47 | 424.13 | 5.35 | 115.91 |
| Warren..... | 227.00 | 8,577.99 | 344.96 | 9,926.90 | 209.82 | 228.72 |
| Wayne Road South..... | 12.15 | 2,013.06 | 2,244.33 | 1,219.29 | 58.19 | 26.60 |
| West..... | 44.57 | 1,505.68 | 2,677.73 | 522.21 | 4.68 | 5.89 |
| Totals..... | \$6,855.88 | \$173,482.64 | \$83,950.92 | \$1,191.91 | \$8,035.08 | \$4,325.52 |
| | | | | | | \$411,293.83 |

EXPENSES INCLUDE:

Small tools, hardware, etc.

GRADE INCLUDES:

Macadam Shoulders,
Guard Rail, Cutting Weeds,
Ornamental Road Signs.

SURFACE INCLUDES:

Tarring Cracks and Holes,
Concrete patches,
Bituminous Repairs.

Board of
County Park Trustees
of Wayne County, Michigan,
1924 - 1925

1103 REAL ESTATE EXCHANGE BUILDING
Telephone Randolph 9105
DETROIT, (Wayne County) MICHIGAN



TRUSTEES

EDWARD N. HINES.....Detroit, Michigan
Chairman and Superintendent
WM. F. BUTLER.....Trenton, Michigan
Secretary
JOHN S. HAGGERTYDetroit, Michigan



*The personnel of the Board of County Park Trustees is
the same as that of the Board of County Road Commissioners,
who serve as Park Trustees without pay.*



Entrance to Cass R. Benton Park, unimproved at the present time. This park is on the Northville Road and is the generous gift of the late Cass R. Benton, a former County Road Commissioner, to the people of Wayne County.

Sixth Annual Report of
Board of County Park Trustees
of Wayne County, Michigan

From September 15, 1924, to September 1, 1925, inclusive

DETROIT, MICHIGAN,
September 1, 1925

*To the Members of the Board of Supervisors,
Wayne County:*

GENTLEMEN: In compliance with the statute relating thereto, we take pleasure in submitting for your consideration, the Sixth Annual Report, showing moneys received and disbursed, and the progress to date in the development of the parks, parkways and playgrounds of Wayne County.

Very sincerely,

BOARD OF COUNTY PARK TRUSTEES
WAYNE COUNTY, MICHIGAN

EDWARD N. HINES, Chairman and Sup't
WILLIAM F. BUTLER, Secretary
JOHN S. HAGGERTY



Elizabeth Park from the Detroit River, showing promenade from bridge entrance.

Wayne County Parks

THE work of constructing and maintaining our County parks has shown increased results during the past year. Large crowds have made use of these parks daily, especially during the summer months. Additional buildings have been erected, more paths, drives, and parking spaces have been constructed; trees and shrubs have been planted; and the entire system has been efficiently maintained.

Since January 1, 1925, two new parks have come under the control of this Board. Victory Park, located at the junction of Huron River Drive, Belleville, and Sumpter Roads, was deeded to the County on February 13th, 1925, by the Belleville Park and Playground Association. Cass Benton Park, located on the Northville Road, was deeded to the County by Mrs. Cass Benton on the 8th of April, 1925. Much credit is due the donors of these parks, as their unselfish aims and far-sightedness have made available for public use two most attractive and well-located parks. It would be difficult to render a better service to the County, and accommodate such a large number of people.

The sum of \$10,000.00, from the regular park budget, was made available by the Board of Supervisors for use in starting the development of Victory and Cass Benton Parks this year.

It is our intention during the coming year to continue the development of parks and provide sufficient facilities for all who wish to avail themselves of their use.

Elizabeth Park

Thousands of people have visited Elizabeth Park during the past summer. This park, comprising an area of 162 acres, at Trenton, and the largest unit of our system, has been provided with additional improvements to accommodate the ever-increasing number of people.

Since September 1, 1924, approximately two miles of stone and concrete walks have been constructed, 8000 square yards of stone parking space, and numerous concrete steps have been built. The entire water front along the River Walk has been lighted with boulevard lights, as has also the parking space along River Road.

A concession has been granted for the operation of a pony livery. Approximately 18 ponies have been used daily in the park during the summer. Children are allowed the privilege of using the pony drive at



New Tourists' Lodge at Elizabeth Park on the River Road.



Camp site in connection with the Tourists' Lodge. This convenience to the traveling public has been much appreciated.

small cost. Judging by the large number of children taking advantage of this, it appears to be one of the most interesting features of the park.

Two new comfort stations have been completed, making a total of three now in use. These buildings are permanent structures, stone and brick being used in their construction. They are 44 feet by 22 feet in size, and each contains a rest room for women. Two of these buildings contain heating plants to accommodate visitors to the park regardless of the season.

A drinking fountain pavilion has also been completed, containing sixteen fountains. Previous to this time, only one drinking fountain was available, making it practically impossible for everyone to obtain a drink. This feature alone has added greatly to the comfort of those using the park. The building, which is in the form of a shelter, 20 feet by 34 feet, is of the usual stone and brick construction, with a concrete floor and slate roof.

The two footbridges over the canal, which were being constructed last fall, have been completed. They are being connected with paths leading from the parking space on River Road. These bridges, together with paths and the new parking space, will make it possible to accommodate many more people than formerly.

Approximately 1400 trees and 15,000 shrubs were planted. These are receiving our usual maintenance of cultivating, mulching, spraying, and watering. Last winter, approximately 400 dead trees were removed. The wood was cut and sold by the cord, the money being deposited with the County Treasurer. It is necessary to carry on a continuous planting program each year to take care of old trees which are now dying.

Thirty new tables and a number of additional stoves and seats have been provided. During the coming year, it will be necessary to install more of this park furniture.

A tourists' lodge and camp have been built in the River Road side of the park. Its location on this main highway is of considerable convenience to tourists. The building, approximately 45 feet by 80 feet in size, is completely equipped for all purposes. A dining-room, 26 feet by 20 feet, is furnished with five gas stoves, twelve tables, and thirty-six chairs. Gas is generated from a plant in the basement, and is made available for use through 5-cent meters. This room is for the use of tourists during bad weather.

In the center is the large lobby and concession stand, where refreshments and canned goods may be bought. Light lunches are also served. The lobby, which is 20 feet by 20 feet in size, provides shelter and serves as a location for a public pay station telephone and drinking fountains. A United States mail box is located just outside the door, where mail is collected and delivered daily.



Lounge Room in Tourist's Lodge and Public Shelter on the River Road.



Dining room and kitchen in Tourist's Lodge and Public Shelter. You can drop a nickel in the slot and get enough gas to cook a generous meal.

Across the lobby from the dining-room is located the lounge-room, with its large fireplace and comfortable furniture. The size of this room is 20 feet by 20 feet. Here, writing desks are provided, and guests register before entering the camp.

From the lounge room open separate rooms for men and women, including a special rest room for the ladies. Shower baths, toilets, wash bowls, mirrors, towels, etc., are provided. Both hot and cold running water is available at all times.

In the basement of the building are laundry tubs for the use of campers. An ironing board and an electric iron are also available. The caretaker of the camp lives in the Tourist Lodge in a room adjoining the concession stand. This provides proper security and protection at all times—there being a man on duty 24 hours each day.

An air pump is installed at the rear of the building for automobile tires. The Lodge is built entirely of brick and stone, with a slate roof. A steam heating plant keeps the rooms at the proper temperature during cold weather.

The camp which adjoins the Lodge has been divided into lots, 30 feet by 30 feet in size. A stone drive, 1000 feet long and 16 feet wide, provides access to the camp lots. Automatic shut-off water taps have been installed at every third lot, and each lot is provided with a concrete field stove and table, with seats attached. According to the number of people now using this camp, it will be necessary to provide more lots during the coming year. We have available space to accommodate 130 parties.

The tourist lodge and camp were officially opened on June 15, 1925, and since that time, our present lots have been filled nearly every night. One party is allowed to stay in the camp three nights in succession only, and a charge of 50 cents per car per night is made. A further charge of 10 cents is also made for using the shower baths, they being equipped with dime locks. These charges are made only to help protect the legitimate tourist from undesirables, and to pay in part the actual cost of maintaining the camp and building.

The following statistics have been gathered during the past year in Elizabeth Park:

Smallest crowd using park in one day, 100; largest crowd using park in one day, approximately, 15,000; an average number of 12 tennis permits issued per day; an average number of 500 cars passing through the park per day; approximately 75 picnics were held during the summer; and 30 permits were issued for the use of the ball diamonds.

During the coming year, it is planned to complete additional permanent improvements in this park. More paths are to be constructed, and additional drives built for the tourist camp. A fence should be constructed between park property on the south and the M. C. R. R.,



Comfort Station in Elizabeth Park—one of a series to care for the public in a decent, sanitary manner.



East Comfort Station, Elizabeth Park.

also there should be some improvements made in the fence along the River Walk. A watchman's house should be constructed at the entrance bridge for the use of the night police.

Plans are now being made for the construction of a combination shelter and equipment building. This is a necessity, as there is not shelter enough at present to accommodate many people during bad weather, and the barn which is used as a pony shed and equipment building, is not large enough to house all the necessary tools. A small pony shed for the Shetland ponies and their equipment should be constructed near the center of the park. During the winter, the shelter building could be used for storing and repairing park furniture, such as, tables, swings, playground equipment, etc.

More trees and shrubs should be planted, replacing those that die and completing our planting on reclaimed land, and around new buildings. A number of dead and dangerous limbs remain yet to be removed from the mature trees. An attempt will be made to complete this work next year. There will, however, be a certain amount of maintenance trimming to be done each season.

Our usual maintenance of the entire park will continue, such as, mowing grass, cultivating trees and shrubs, watering, spraying, trimming, picking papers, etc., repairing walks and drives, police duties, and keeping the various buildings clean. This will require more work in the future than in the past, due to the added improvements.

Huron River Park

This park, consisting of approximately 16 acres at the junction of the Huron River Drive and Willow Road, has developed into one of our most beautiful landscape areas. Approximately 10 trees and 600 shrubs were planted last year. The regular maintenance of the park has continued, consisting of spraying, cultivating, mowing grass, police duties, cleaning comfort station, etc.

Several hundred cars pass through this park daily during the summer months, and it is estimated that as many as 5000 people have made use of the park on the busiest days. A public pay station telephone has been installed in the information booth of the comfort station.

During the coming year, it is planned to construct additional drives which will make it possible to accommodate a larger number of people. Playground equipment will be installed for the use of children, and it is also planned to construct a water main to the park from the Flat Rock filtration plant. It is believed that this is a necessity, as there is no drinking water at present in any part of the park. The Huron River, which borders one side of the park, is extremely polluted and cannot be used for drinking purposes.



Public Comfort Station in Huron River Park.



Victory Park, located at the junction of the Huron River Drive, Belleville and Sumpter Roads. A charming spot to rest or picnic. A sanitary public comfort station has been erected at this location.

It is further planned, due to the historical location of the park, to construct a memorial to the Wyandotte Indians. This memorial would be in the form of a drinking fountain and park seat, constructed of stone and located close to the cinder drive. Besides being a memorial, this fountain would be of practical use to the public and a fitting addition to the park.

The regular maintenance of this park will continue, including the planting and care of trees and shrubs, police duties, and all necessary work required to keep the park in a presentable and sanitary condition. Our park police are on duty here 24 hours each day.

Phoenix Park

Phoenix Park, comprising approximately 4 acres and located at the west end of the Five Mile Road near the Northville Road, has been a serviceable pleasure spot for many motorists. As many as 2500 people have used this park at one time. All permanent construction in this park has been practically completed. The maintenance of steps and walks, however, requires more work than ordinarily, due to the hilly nature of the land.

A public pay station telephone has been installed in the information booth of the comfort station.

Approximately 8 trees and 2200 shrubs were planted last year, and it is planned to continue our maintenance planting, trimming, spraying, etc., during the coming year. It is also planned to install some playground equipment for the children. Park police are on duty 24 hours each day.

Victory Park

Victory Park, consisting of approximately 3 acres and located at the junction of Huron River Drive, Belleville, and Sumpter Roads, offered an unusually good site for the construction of a roadside comfort station.

This building has just been completed by the Board of County Road Commissioners, and is an excellent addition to the park, both in beauty and utility. This structure is built of stone and brick, with a slate roof. It has separate compartments for men and women, an information booth with a public pay station telephone, and a furnished ladies' rest room. The lobby constitutes a park shelter. It is equipped with steam heat and hot and cold running water.

A number of lawn seats have been supplied, all the trees have been trimmed, and the grass kept mowed and watered. A caretaker is on duty both day and night.



Phoenix Park in winter—comfort station in the background and Five Mile Road in the foreground.



Another View of Phoenix Park.

Next year, it is planned to plant a few trees and shrubs around the new building and construct a sidewalk and curb in front, so as to make ample room for parking. The customary upkeep of both park and building will continue.

Cass Benton Park

This park, covering an area of about 16 acres, is located approximately one mile south of Northville on the Northville Road. The late Cass Benton, of Northville, willed this park to Mrs. Cass Benton, to be given to the County at her death. Mrs. Benton, however, has deeded her interest to the County, making it possible to immediately improve this area for public use. It is one of the most beautiful park sites in the county and is well located for park purposes.

A circular gravel drive through the park, with various parking spaces, is now being constructed, which will make all parts accessible to the motorist. A number of tables, benches, and stoves have been installed. All trees have been trimmed, and a drinking fountain constructed. Running water is available from the main supplying the Village of Plymouth, which runs through the park. A caretaker is on duty both day and night.

It is planned during the coming year to construct a comfort station here. Temporary convenient stations have already been installed, but they are not adequate and cannot be kept sufficiently sanitary to accommodate the number of people now using this park. Plans are also being made for the construction of a bridle path. It is expected that this will become one of our most popular parks.





Two scenic locations in the new Cass Benton Park.

Rules and Regulations

DURING the past year, the following rules and regulations were adopted by this Board. They have been printed and posted in all the parks.

Preservation of the Property and Natural Features of Parks:

No person shall injure, deface, disturb, or befoul any part of the parks, nor any building, sign, equipment, or other property found therein; nor shall any tree, flower, shrub, rock, or other mineral be removed, injured, or destroyed.

Garbage, Sewerage, Refuse, and Obnoxious Material:

No person shall deposit in any part of the parks any garbage, sewerage, refuse, waste, or other obnoxious material, except in receptacles or pits provided for such purposes.

Traffic:

No person shall drive or propel, or cause to be driven or propelled, along or over any roads within the parks, any vehicle at a greater speed than twenty (20) miles per hour, and due care shall be exercised at all times to prevent accidents.

Camping:

No camps shall be maintained at any time, except at such places as may be designated for camping, and no fires shall be lighted at any time in any part of the parks, except in stoves designated for such purpose.

Commercial Enterprise:

No person shall, without written authority from the Board, sell or offer for sale within the parks any property or privilege whatsoever, nor shall any person to whom property of the parks has been entrusted for personal use, hire, lease, or let out the same to any other person.

No person shall take photographs or moving pictures within the parks for the purpose of selling the negatives thereof or prints therefrom without having first received a written permit from the Board.

No person operating a boat for hire shall, without written permission from the Board, land or receive passengers at any point on park property.



Play time for the kiddies in Elizabeth Park—Pony livery.



*Recreation is also provided for the grown-ups as well as the kiddies in Elizabeth Park.
These tennis courts are well patronized.*

Fire Arms:

No person except employees or officers of the Board shall carry fire-arms of any description within the parks.

Hunting:

No person within the confines of the parks, unless ordered by the Board, shall hunt, pursue with dogs, fish, trap, or in any way molest any of the wild birds, beasts, and fish found within the limits of the parks.

Gambling:

Gambling in the parks is prohibited, and no person shall bring into the parks, or have in his possession while there, any implement or device commonly used or intended to be used for gambling purposes.

Signs:

No sign or notice shall be erected or posted at any place in the parks without written permission from the Board.

Grazing:

The running at large, herding, grazing, or driving of live stock of any kind in or through the parks is prohibited.

Dogs and Cats:

No person shall bring into, have, or keep any cat or other animal destructive to bird life, nor shall any person bring into, have, or keep in the parks any dog unless the same is in leash, or a permit for the bringing in and keeping of such dog within the parks has been obtained from the Board.

The term "Park," as used herein, means all Parks owned and controlled by the Board of Wayne County Park Trustees. The term "Board" means the Board of Wayne County Park Trustees. The term "person" means all persons or organizations.

The foregoing Rules and Regulations will be enforced according to the laws of the State of Michigan, the County of Wayne, city, and village ordinances.





Drinking fountain pavilion at Elizabeth Park.



Camping at our Tourists Camp site on the River Road. This party hails from San Diego, California.

Huron River Park

Site of the Last Home in Michigan of the Wyandotte Nation of Indians

By S. M. Keenan

Who of us in Wayne County does not appreciate our magnificent concrete roads and wonderful highway parks; who of the thousands upon thousands of tourists has not expressed admiration of their splendid construction and scenic beauty?

White bands of concrete, the roads stretch away in graceful curves through villages and farms, skirting here and there sinuous rivers and beauteous lakes, ever-changing vision of sparkling waters, landscape green, and woodland of variegated hues.

Of all the fine roads in the county, the Huron River Drive probably is the most scenic. Following along the escarpment of the river, the drive curves to the southwest at the Kettle Bridge, enters the western limits of the former reservation of the Wyandots, and crosses the Huron on a solidly built and architecturally beautiful concrete bridge at the Willow Road.

Between the river and the diagonal drive is the Huron River Park of sixteen acres.

The wonderful drive, the elegant comfort-station, the magnificent bridge, add artistic beauty to a naturally lovely spot.

The cindered paths, winding among the splendid trees, the shady nooks, and green carpeted dells, lend charm and loveliness to the delightful sylvan retreat, so restful, so quiet, so peacefully inviting.

Who of those driving delightedly through this beautiful park, loitering in its cool shades, or lunching on its lawns, ever gives a thought to the history of the charming spot? Probably not one in ten thousand ever heard it connected with Indian lore and legend.

Still, this park is within the confines of an Indian reservation, the last home in Michigan of the Huron or Wyandot Nation.

Here, in wigwam or council house, a hundred years ago the Wyandot chiefs were wont to assemble and recount the glory that was theirs, the wars, the feasts, the sorrows.

Within the precincts of the park lie in eternal rest the stalwart bodies of warriors of a century ago; here sleep actors in the war of 1812, friends and foes of Hull, Cass, Harrison, Brock, and Tecumseh. How fittingly is their last resting-place marked by the splendid park, and how fortuitously was the site selected—for its history was unknown to the Board of County Road Commissioners when the selection was made.



Another comfort station located in Elizabeth Park.



Comfort Station No. 3 on Telegraph Road.

Let this park, which commemorates their name as known among the French, be so marked that every tourist will carry away in memory its beauty and its history.

Every state in our country is striving to save its historic remains, and suitably mark them with tablets or monuments.

The Detroit Historical Society, the Michigan Historical Commission, the Michigan Archaeological Society, and many others of like nature, as well as many private persons, are doing everything possible to awaken interest in local history, to conserve and mark historic spots, and preserve for future generations exact knowledge of the aborigines and pioneers.

It is much to be desired that the County Road Commissioners will see their way clear to erect suitable and lasting memorials of the Wyandots in this beautiful park. Wayne County is rich in Indian and pioneer history, rich beyond any county in the state, and why not preserve those historic landmarks, now fast passing away?

Part of the headstone of Chief Quoqua, one of the signers of the treaty of 1818, and who died in 1822, has been preserved. This should be suitably mounted in a monument in the park. The site of his log cabin is known, and should be marked.

The drives should be given Wyandot names of chiefs or their families, the woodland should be given an aboriginal atmosphere. In these ways, the last home of the brave Wyandots may become a historic landmark of Wayne County.

Who were the Wyandots or Hurons? The Indians of the Iroquois confederacy and those of the Huron confederacy are from the same parent stock. Though deadly enemies from a period long before the discovery of America, nevertheless their language, manners, and customs declare them the same.

We first hear of them in history from the reports of the French explorers, Cartier and Champlain. Originally, they lived in peace, according to their traditions, along both sides of the River St. Lawrence, but tribal jealousies developed into civil war.

When Champlain settled at Quebec, he took up the cause of the Hurons, who had moved from the St. Lawrence to the vicinity of Lake Simcoe, near the present city of Orillia.

Here Champlain visited them, and found many villages between Lake Simcoe and Georgian Bay, constituting a population of over twenty thousand persons. Taking the normal Indian culture as a criterion, they were highly civilized.

Their villages were palisaded and fortified; they lived in large bark houses, many families in each house; they fished, hunted, and farmed on a small scale, for their living. Unlike the Algonquins, they were not nomadic in habits.

They raised large quantities of corn, which they stored for future use, and seldom suffered from famine, except in periods of war with the Iroquois.

The French called them Hurons on account of the way they wore their hair, or, according to some, on account of their splendidly developed physiques. The Indian name of the confederacy was Wendat or Wyandot.

So fierce was the hatred between them and their Iroquoian brethren, so terrible were their wars, that numbers of warriors on both sides were rapidly depleted.

The Hurons were aided by the French, the Iroquois by the English and Dutch settlers. After the Iroquois had secured a large supply of guns and ammunition, far beyond the supply in the hands of the Hurons, they secretly crossed Lake Ontario, tramped silently through the forest, and fell upon the Huron villages with lead and flame.

The Hurons were unprepared, for it was early in March, 1649, and little suspected the Iroquois at such a time.

But those intrepid warriors had set out from their villages during the previous fall, lived all winter in the forests, and fell upon the Hurons as soon as the melting snows permitted. Panic reigned in Huronia.

The Iroquois rushed from village to village, burning the bark houses and slaughtering old and young. The Hurons' stores of corn were destroyed, the furs of the winter hunt captured, desolation and ruin were on every hand. Many saved themselves in the remotest villages by hiding in the forest, but starvation and utter ruin stared them in the face. Huronia was no more, a great nation had been destroyed by a kindred nation.

The refugees scattered to the four winds, sought shelter, some among the Tobacco Nation to the south of Huronia, some among the French settlers at Quebec, some among the Algonquins of the upper lakes, and some among the fierce Sioux of the northern prairies.

Still the terrible Iroquois pursued them, and fell upon the Tobacco Nation for succoring them. After Cadillac founded Detroit, he invited the homeless Hurons, wanderers for half a century, to settle near the fort. An early chart in the Burton Collection shows the Huron village at the mouth of the Huron Creek, otherwise known as the Savoyard.

The Jesuits founded a mission for others on the south shore of Detroit River, at the present town of Sandwich. Under the protection of the French at Detroit, they increased in numbers, for other wandering bands of the nation joined them.

They established villages along the Detroit River to Lake Erie, on Fighting Island and on Bois Blanc. Their spirit was broken, their savage pride humbled, but they found in the French true friends and protectors.

Many of the French settlers chose wives from among the Hurons, and thus was formed strong ties of affection and lasting friendship.

Other Indians had built villages near Detroit, the Ottawas and Potawatomes, of the Algonquin stock, but they were far inferior in every way to the Hurons, who had become largely a half-breed stock through intermarriage with the French.

With the passing of Canada from the French to English rule in 1759, conditions changed very materially for the Indians at Detroit.

The English treated the Indians as inferiors, and would not tolerate their shortcomings.

The Indians resented this treatment very much, and were urged, by the French, no doubt, to openly express their resentment. Soon a spirit of hostility was manifested which led to the Pontiac Conspiracy.

Pontiac was the greatest Indian warrior of his time, if not of all time, and he found the Hurons, now generally called Wyandots on the north shore of the river, the strongest and brainiest of his abettors. Their old spirit of bravery had returned, and their war-cry pierced the forest as of yore.

They became the recognized leaders of the great confederacy, the Keepers of the Wampum, and Keepers of the Council Fire, and at their behest all the nations of the northwest assembled in council at the mouth of Detroit River.

During the Revolution, they naturally fought on the side of the English, but during the war of 1812, they were divided. Every effort was made by Tecumseh to win them over to the British, but he was only partially successful. After the war, many of the Wyandots moved to Canada, while others joined their band at the Upper Sandusky.

In the treaty of 1795, all the Indians along the Detroit ceded their lands to the United States. By the terms of the treaty, a strip of land six miles wide, extending from the River Raisin to Lake St. Clair, was surrendered.

They were allowed to remain in their villages for fifty years, according to the treaty terms, but in 1818, they were forced to relinquish Brownstown and Monguagon and accept a tract of land of 4996 acres along the Huron River in Huron township.

Here they remained until 1842, when they surrendered their rights to the reservation, and joined their brother Wyandots on the Upper Sandusky.

The following year, they removed to Kansas. The remnants of the once-powerful nation live in Oklahoma, and their Canadian brethren in Lorette, Quebec.

The glory of the Wyandots has gone forever, but their exploits, their wars, and their tragedy blaze the pages of our colonial history. Have they been wronged by the white race?

Our treatment of the Indian reflects no glory in our records, their lands were their crimes, our rapacity was our hostile incentive.

Picture of Mary McKee

The accompanying picture of Mary McKee is reproduced from a daguerreotype taken when she was eighteen years old. She was the daughter of Kitty Que-qeh, or Quoqua, who was the daughter of Chief Quoqua, one of the signers of the treaty of 1818. Kitty Quoqua's first husband was Thomas McKee, and Mary was their only child. She was a quarter-blood Wyandot, and was born April 8, 1838, in the home of her grandfather, Chief Quoqua, who lived in the log house across the river from the park. Mary was a true child of the forest, beautiful, modest, and beloved by all who knew her. She was well educated, speaking with ease French, English, and Wyandot. Her knowledge of bird-life was marvelous, naming them all by song or flight. Her beauty and comeliness in youth won the heart of a young easterner, the wedding day was set, but Mary learned that the mother of her lover objected on account of her Indian blood, and she at once broke off the engagement. She refused several offers of marriage later, and died single at the age of eighty-five, at the home of her cousin, B. N. O. Walker, on the Indian reservation in Ottawa County, Oklahoma. "Her shroud was what was to have been her wedding dress," preserved by her for fifty years.

The other picture shows her at the age of seventy-five. She is shown surrounded by several Indian household utensils, mostly made by her mother.

The writer is deeply indebted to Mr. Walker, Mary's only cousin, for details regarding her and her mother. Mr. Walker is a finely educated Wyandot, who lives on the Quapaw Indian reserve in Oklahoma.



MISS MARY
McKEE of Anderdon Reser-
vation, Essex County, Ontario,
at the age of
eighteen.

*(From a daguerreo-
type.)*



MISS McKEE
at seventy-three
years of age.

Board of County Park Trustees

Expenditures

| | Sept. 16 to Nov. 30, 1924 | Dec. 1, 1924 to Aug. 31, 1925 | Totals for Year |
|--|---------------------------------|-------------------------------------|-----------------------|
| A-2-4 Salaries, Temporary..... | \$ 3,572.31 | \$12,822.01 | \$16,394.32 |
| B-1 Transportation of Persons..... | | 420.47 | 420.47 |
| B-2 Transportation of Things..... | 1.63 | 4,584.99 | 4,586.62 |
| B-3 Subsistence of Persons..... | 3.50 | 51.10 | 54.60 |
| B-5 Hire of Motor Vehicles..... | | 225.66 | 225.66 |
| B-6-A Postage..... | | 50.00 | 50.00 |
| B-6-B Telephone and Telegraph..... | 34.85 | 108.54 | 143.39 |
| B-8 Advertising..... | 2.93 | 107.79 | 110.72 |
| B-9 Public Utility Service..... | 968.10 | 3,971.52 | 4,939.62 |
| B-11 Repairs on Improvements..... | 2,350.94 | 1,326.68 | 3,677.62 |
| B-33 Other Services..... | 232.63 | 331.70 | 564.33 |
| C-1 Non-Metallic and Mineral..... | | 1,089.02 | 1,089.02 |
| C-2 Fuel..... | 82.25 | 343.80 | 426.05 |
| C-6 Metal and Manufactured..... | 502.08 | 2,589.88 | 3,091.96 |
| C-7 Household Utensils..... | | 22.66 | 22.66 |
| C-8 Lumber..... | | 709.26 | 709.26 |
| C-9 Paper and Paper Products..... | | 296.45 | 296.45 |
| C-10 Fiber and Felt Products..... | | 25.51 | 25.51 |
| C-11 Paints and Painters' Supplies..... | 71.42 | 367.65 | 439.07 |
| C-12 Stationery and Office Supplies..... | | 167.55 | 167.55 |
| C-13 Dry Goods and Notions..... | 64.60 | 485.09 | 549.69 |
| C-16 Rubber and Rubber Articles..... | 13.95 | 188.28 | 202.23 |
| C-17 Electrical and Lighting Supplies..... | | 6.25 | 6.25 |
| C-18 Cleansers, Polishes, etc..... | .48 | 58.47 | 58.95 |
| C-19 Instruments for Cleaning..... | 1.00 | 36.71 | 37.71 |
| C-12 Miscellaneous..... | | 300.01 | 300.01 |
| C-23 Trees, Shrubs, Seeds, etc..... | 4,501.88 | 33,489.93 | 37,991.81 |
| D-4 Insurance..... | | 1,998.63 | 1,998.63 |
| F-1 Furniture Furnishings..... | | 963.96 | 963.96 |
| F-3 Machinery..... | | 4,978.42 | 4,978.42 |
| G-2-C Eliz. Comfort Stations..... | | 30,733.17 | 30,733.17 |
| G-2-D Eliz. Shelter Station..... | | 3,900.00 | 3,900.00 |
| G-2-E Phoenix Pavilion | | 43,305.86 | 43,305.86 |
| G-2-F Huron Pavilion | | | |
| G-2-G Eliz. Pony Shed | | | |
| G-2-H Eliz. Tourist Shelter | | | |
| G-2-J Temporary Building..... | | 259.01 | 259.01 |
| G-3-E Eliz. Foot Bridges..... | 500.00 | 508.92 | 1,008.92 |
| G-4-B Eliz. Reclaim Land..... | 151.85 | 27,153.94 | 37,987.56 |
| G-4-D Huron, Excavating and Grading.. | 843.44 | | |
| G-4-E Eliz. Sidewalks..... | 601.00 | | |
| G-4-F Eliz. Paths and Steps..... | 4,977.58 | | |
| G-4-G Phoenix Paths and Steps..... | 161.72 | | |
| G-4-H Drives..... | 4,098.03 | | |
| G-4-I Athletic Field..... | | | |
| G-4-J Install Public Utilities..... | 7,527.15 | 13,867.05 | 21,394.20 |
| Total | \$31,265.32 | \$191,845.94 | \$223,111.26 |

Board of County Park Trustees

Balance Sheet, August 31st, 1925

| | Appropriations | Disbursements | Balance | Overdrawn |
|--|----------------|---------------|-------------|------------|
| A-2 Salaries, Temporary | \$15,000.00 | \$12,822.01 | \$2,177.99 | |
| B-1 Transportation of Persons | 500.00 | 420.47 | 79.53 | |
| B-2 Transportation of Things | 4,500.00 | 4,584.99 | | 84.99 |
| B-3 Subsistence of Persons | 100.00 | 51.10 | 48.90 | |
| B-5 Hire of Motor Vehicles | 250.00 | 225.66 | 24.34 | |
| B-6-A Postage | 100.00 | 50.00 | 50.00 | |
| B-6-B Telephone | 200.00 | 108.54 | 91.46 | |
| B-8 Advertising | 100.00 | 107.79 | | 7.79 |
| B-9 Public Utility Service | 4,500.00 | 3,971.52 | 528.48 | |
| B-11 Repairs on Improvements | 2,500.00 | 1,326.68 | 1,173.32 | |
| B-12 Laundry, Ice, etc. | 50.00 | | 50.00 | |
| B-13 Other Services | 500.00 | 331.70 | 168.30 | |
| C-1 Non-Metallic and Mineral | 2,000.00 | 1,089.02 | 910.98 | |
| C-2 Fuel | 500.00 | 343.80 | 156.20 | |
| C-6 Metal and Manufactured | 2,500.00 | 2,589.88 | | 89.88 |
| C-7 Household Utensils | 50.00 | 22.66 | 27.34 | |
| C-8 Lumber | 1,500.00 | 709.26 | 790.74 | |
| C-9 Paper Products | 300.00 | 296.45 | 3.55 | |
| C-10 Fiber and Felt | 50.00 | 25.51 | 24.49 | |
| C-11 Paints and Supplies | 300.00 | 367.65 | | 67.65 |
| C-12 Stationery and Office | 200.00 | 167.55 | 32.45 | |
| C-13 Dry Goods and Notions | 500.00 | 485.09 | 14.91 | |
| C-16 Rubber Articles | 250.00 | 188.28 | 61.72 | |
| C-17 Electrical Supplies | 100.00 | 6.25 | 93.75 | |
| C-18 Cleansers and Polishes | 50.00 | 58.47 | | 8.47 |
| C-19 Instruments for Cleaning | 50.00 | 36.71 | 13.29 | |
| C-21 Miscellaneous | 300.00 | 300.01 | | .01 |
| C-23 Trees, Shrubs, Seeds, etc. | 35,000.00 | 33,489.93 | 1,510.07 | |
| D-4 Insurance | 300.00 | 1,998.63 | | 1,698.63 |
| F-1 Furnishings | 1,000.00 | 963.96 | 36.04 | |
| F-3 Machinery | 8,900.00 | 4,978.42 | 3,921.58 | |
| G-2-C Eliz. Comfort Stations | 29,999.94 | 30,733.17 | | 733.23 |
| G-2-D Eliz. Shelter Station | 25,000.00 | 3,900.00 | 21,100.00 | |
| G-2-E Phoenix Pavilion | 46,000.00 | 43,305.86 | 2,694.14 | |
| G-2-F Huron Pavilion | | | | |
| G-2-G Eliz. Pony Shed | | | | |
| G-2-H Eliz. Tourist Shelter | | | | |
| G-2-I Storage Buildings | 30,000.00 | | 30,000.00 | |
| G-2-J Temporary Buildings | 2,000.00 | 259.01 | 1,740.99 | |
| G-3-E Eliz. Foot Bridges | 501.35 | 508.92 | | 7.57 |
| G-4-E Sidewalks | 39,322.20 | 27,153.94 | 12,168.26 | |
| G-4-F Eliz. Paths | | | | |
| G-4-G Phoenix Paths | | | | |
| G-4-H Drives | | | | |
| G-4-I Athletic Field | 20,536.17 | 13,867.05 | 6,669.12 | |
| G-4-J Install Public Utilities | | | | |
| Totals | \$275,509.66 | \$191,845.94 | \$86,361.94 | \$2,698.22 |
| Deduct | 191,845.94 | | 2,698.22 | |
| NET BALANCE | \$83,663.72 | | \$83,663.72 | |

THE LIBRARY OF THE
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UNIVERSITY OF ILLINOIS

FRIESEMA BROS. PRINTING CO.
EAST GRAND BLVD. AT MORAN
DETROIT

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

PROPOSED SUPER-HIGHWAYS AND ROADS IN VICINITY OF DETROIT

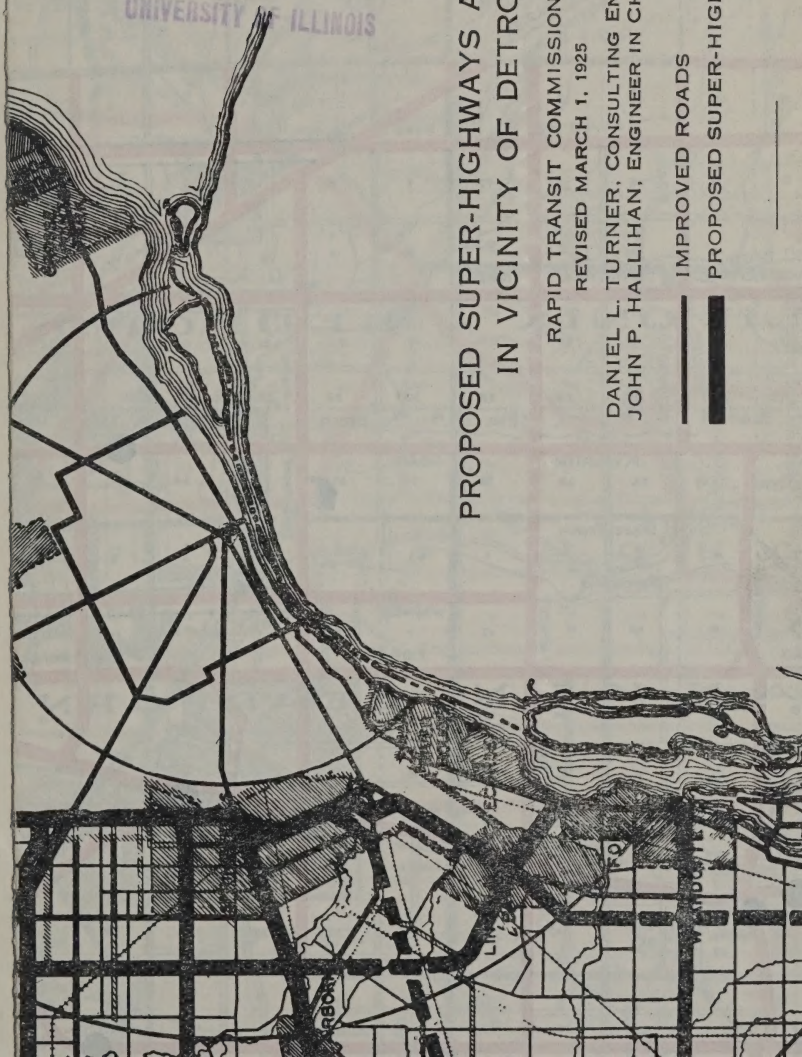
RAPID TRANSIT COMMISSION

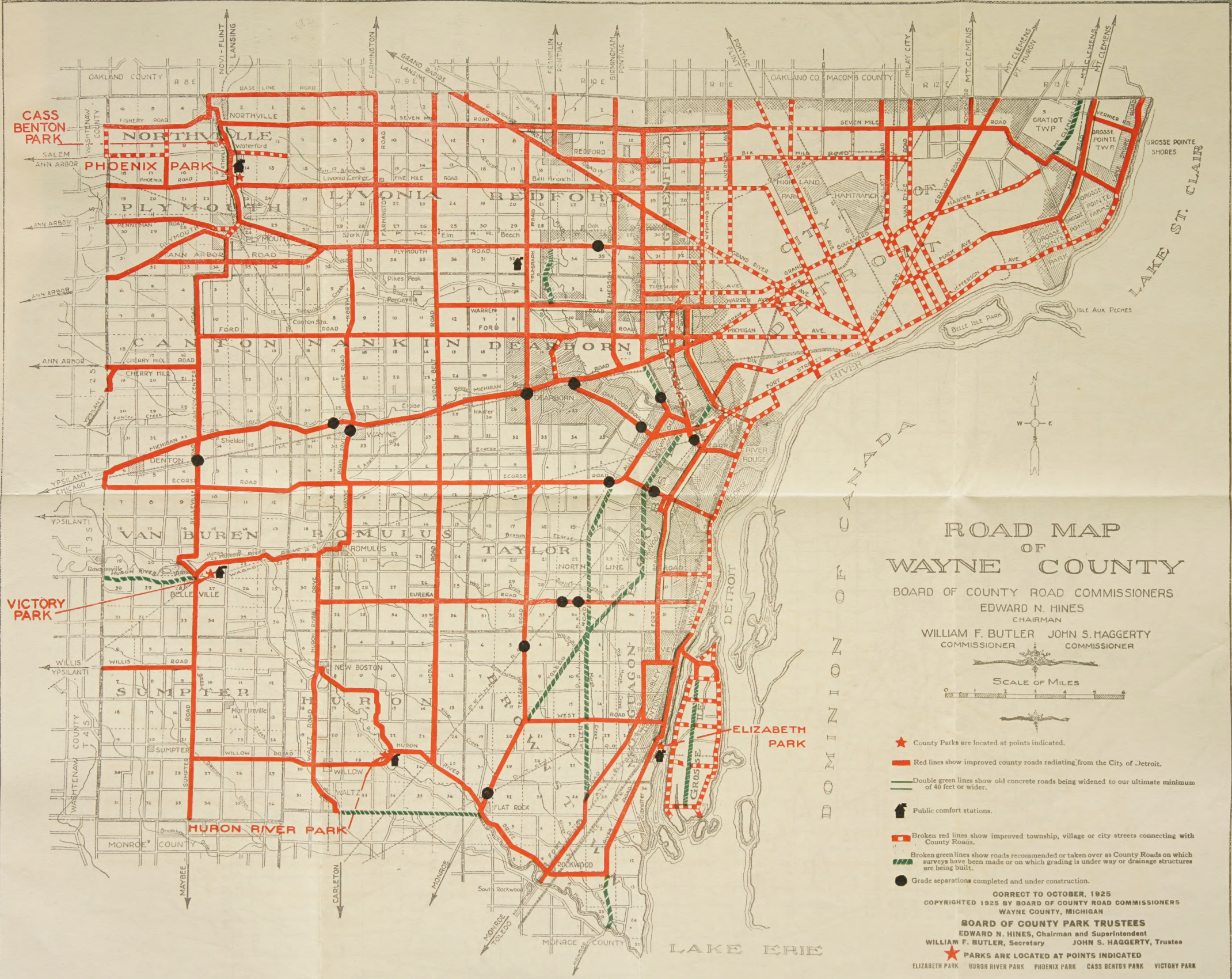
REVISED MARCH 1, 1925

DANIEL L. TURNER, CONSULTING ENGINEER
JOHN P. HALLIHAN, ENGINEER IN CHARGE

IMPROVED ROADS

PROPOSED SUPER-HIGHWAYS



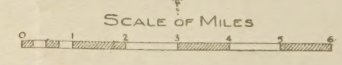


ROAD MAP OF WAYNE COUNTY

BOARD OF COUNTY ROAD COMMISSIONERS

EDWARD N. HINES
CHAIRMAN

WILLIAM F. BUTLER JOHN S. HAGGERTY
COMMISSIONER COMMISSIONER



- ★ County Parks are located at points indicated.
- Red lines show improved county roads radiating from the City of Detroit.
- Double green lines show old concrete roads being widened to our ultimate minimum of 40 feet or wider.
- Public comfort stations.
- Broken red lines show improved township, village or city streets connecting with County Roads.
- Broken green lines show roads recommended or taken over as County Roads on which surveys have been made or on which grading is under way or drainage structures are being built.
- Grade separations completed and under construction.

CORRECT TO OCTOBER, 1925
COPYRIGHTED 1925 BY BOARD OF COUNTY ROAD COMMISSIONERS
WAYNE COUNTY, MICHIGAN

BOARD OF COUNTY PARK TRUSTEES

EDWARD N. HINES, Chairman and Superintendent

WILLIAM F. BUTLER, Secretary

JOHN S. HAGGERTY, Trustee

★ PARKS ARE LOCATED AT POINTS INDICATED

ELIZABETH PARK HURON RIVER PARK PHOENIX PARK CASS BENTON PARK VICTORY PARK

UNIVERSITY OF ILLINOIS-URBANA



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